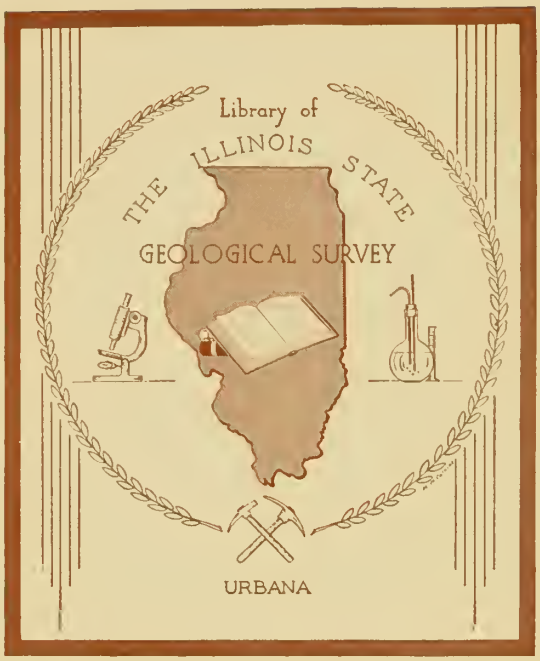

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Department of Registration and Education
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STRUCTURE OF HERRIN (NO. 6) COAL BED IN MACOUPIN COUNTY, EASTERN GREENE AND JERSEY, SOUTHEASTERN SCOTT, AND SOUTHERN MORGAN AND SANGAMON COUNTIES, ILLINOIS

By

J. Norman Payne

With Discussion of

OIL AND GAS POSSIBILITIES

By

William H. Easton

CONTENTS

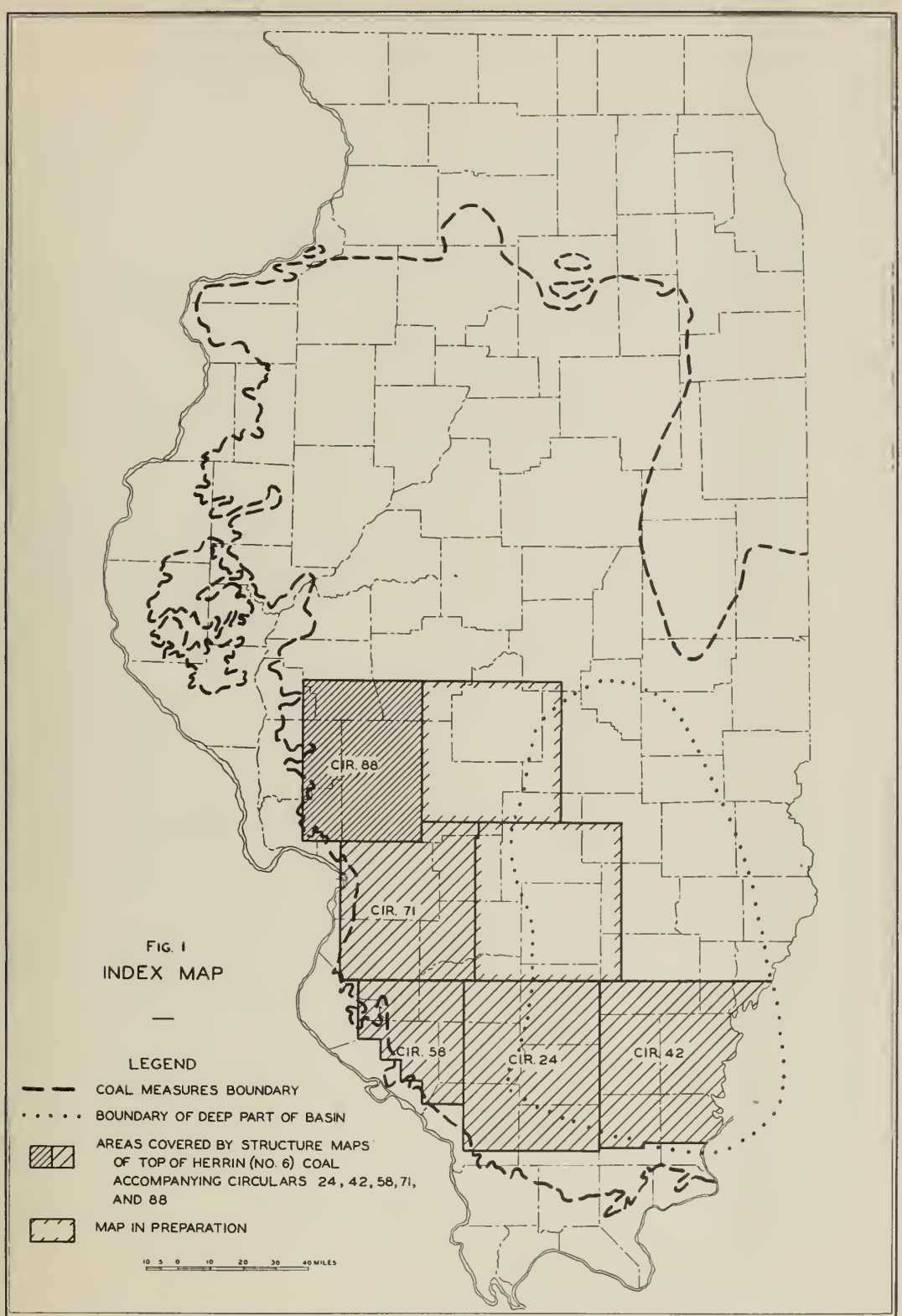

FIG. 1
INDEX MAP

STRUCTURE OF HERRIN (NO. 6) COAL BED IN MACOUPIN COUNTY, EASTERN GREENE AND JERSEY, SOUTHEASTERN SCOTT, AND SOUTHERN MORGAN AND SANGAMON COUNTIES, ILLINOIS

By

J. NORMAN PAYNE

This circular presents a brief discussion of the structural features of the Herrin (No. 6) coal bed in Macoupin County and in parts of adjacent counties on the west and north (fig. 1), and also a brief consideration of the Pennsylvanian stratigraphy of the area. The north and south boundaries are respectively the north line of T. 14 N., and the south line of T. 7 N., and the east and west boundaries are respectively the east line of R. 6 W. and the west line of R. 11 W of the 3rd P. M.

The area lies within a relatively short distance of St. Louis and East St. Louis and is traversed by the main lines of several railroads that connect St. Louis and Chicago. It is well supplied with excellent highways. Thus convenient and cheap transportation to markets is available.

Coal Mining

This region is an important part of the Illinois coal field. Most of the coal production, however, has been from railroad or shipping mines located in Macoupin County. The county's total production from 1882 to 1930 was 173,985,244 tons (21)*, giving it fourth rank among coal-producing counties in Illinois. Since 1930, it has ranked from second to fifth in various years with a fairly constant annual production of about 3 1/2 to 4 million tons. In 1940, ten shipping mines produced coal from Macoupin County (22); in 1920, at the height of coal-mining activity in Illinois, 17 shipping mines were in operation. About two-thirds of the coal produced in the entire area is from "captive" mines operated by one of the large western railroad companies, but none of this coal enters the general market. Until recently, two other large mines were also "captive" mines owned by a large oil-refining company, but these mines have been idle for several years. Their recently reported acquisition by a large coal company presages early increase in coal production. A number of the mines in the region, however, have been in operation for many years, several for more than 35 years; mining in them is approaching

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* For references, see bibliography, page 7.

property boundaries and probably will stop soon. No new shipping mines have been opened in the region for more than 18 years. An abundant supply of coal still remains in reserve.

Minable Coal Beds

Coal production in this area is mainly from the Herrin (No. 6 coal bed. A few small local mines work the No. 4 or the Colchester (No. 2) coal bed in the western part of the area where these lower coal beds lie near the surface, and a shaft at Medora has produced coal from a coal bed lying about 20 feet below the Colchester (No. 2) bed (pl. 3, Macoupin County No. 174).#

The Springfield (No. 5) coal bed is generally absent in this area except for a thin bed of coal and black "slate" (one or both of which probably represent the No. 5 bed) in a number of drill-holes scattered throughout the area (pl. 3, table 1).

The following table shows the extent of the No. 6 coal bed, the areas mined out, the reserve areas, and the reserve tonnage computed on the basis of one million tons per square mile per foot of thickness of the coal bed.

Coal Reserves

County	Average thickness. Feet	Area underlain by No. 6 coal bed. Square miles	Area of No. 6 coal mined out. Sq. miles	Reserve area Sq. miles	Reserve tonnage. Million tons
Greene	4 - 5 ($4\frac{1}{2}$)	50	1+	49	220
Jersey	3 - 4 ($3\frac{1}{2}$)	55	1+	54	189
Macoupin	6 - 7 ($6\frac{1}{2}$)	855	58	797	5,180
Morgan	3 - 4 ($3\frac{1}{2}$)	150	1+	149	522
Sangamon	6 - 7 ($6\frac{1}{2}$)	160	10	150	975
Total Reserve				1,199	7,086

The information at hand does not warrant an estimate of the reserves of coal represented by other coal beds that may be present.

County well numbers refer to map (pl. 4), tabulated well data, and well logs.

Coal beds below the Herrin (No. 6) bed. - At Medora, a shaft was sunk to a coal bed lying approximately 130 to 140 feet below the horizon of the No. 6 coal bed, about 20 feet below the Colchester (No. 2) coal bed, and a few feet above a thin layer of limestone. This coal bed, designated as the Medora, is regarded as the equivalent of the thin fairly widespread Wiley coal bed in western Illinois, where it lies some distance below the Colchester (No. 2) coal bed and a short distance above the thin persistent Seahorne limestone (20). The Medora coal bed has been reported in a number of logs of drill-holes located within this area (table 1).

The Colchester (No. 2) coal bed mined in the western part of the area is believed to be the bed which to the east is reported in drill-holes at a position 20 to 30 feet above the Medora coal, which latter bed is identified by reference to its underlying thin limestone, as noted above. The altitude, depth, and thickness of No. 2 coal and its distance below Herrin (No. 6) coal bed are presented in the tabulated data accompanying this report and in table 1. These data indicate that this coal bed lies fairly uniformly 80 to 90 feet below the Herrin (No. 6) bed but that locally the interval is 100 feet or more. In general, the coal beds are approximately parallel. The Colchester (No. 2) coal bed has been mined for local use at many places west of the line of outcrop of No. 6 coal bed in Greene County near Roodhouse, as indicated by the map and tabulated data. Where mined, it is generally about 30 inches thick.

The designation "No. 4" is applied loosely to two thick lenticular bodies of coal, one of which has been worked near Roodhouse and the other near Greenfield, and both of which appear to lie only a short distance below the position of the Springfield (No. 5) bed. These lenticular bodies of coal have been mined for many years but only for local trade. The coal bed at Roodhouse was reputed to furnish a block or "cannel" coal of special qualities, possibly because part of the bed is somewhat canneloid. In the Greenfield lens, the bed attains a thickness of nine feet (Greene County Nos. 3 and 76). The No. 4 coal bed or horizon lies between 40 and 60 feet below the top of the Herrin (No. 6) bed, but is not recorded in all drill records. In western Illinois there are locally two lenticular beds at this general position, and it is possible that the same relationship may exist in Greene County. In any event, this is a bed of very local commercial importance.

Key Horizons

The general close parallelism of most of the Pennsylvanian strata make limestones of definite stratigraphic position valuable as key horizons for estimating the depth to the Herrin (No. 6) coal bed or other workable beds at points where such limestones outcrop

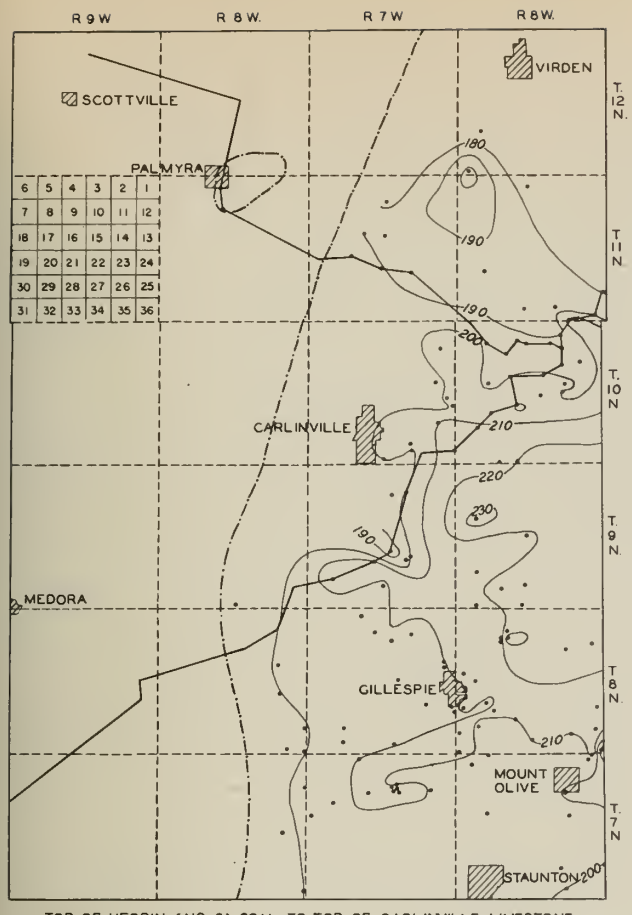
or are penetrated in drilling. Other beds, such as thin coal beds or black "slates," are of similar value if they can be positively identified.

Scottville limestone. - The limestone, for which the name Scottville is here proposed, is well exposed in outcrops along Apple Creek and its tributaries in southern Morgan and northwestern Macoupin counties in the vicinity of the village of Scottville. This limestone is lithologically similar to one which has been called the Carlinville limestone (19) and which crops out in the SW 1/4 SW 1/4 sec. 35, T. 10 N., R. 7 W., near the base of an exposure of Pennsylvanian rocks along Macoupin Creek (pl. 1, John R. Ball Section).

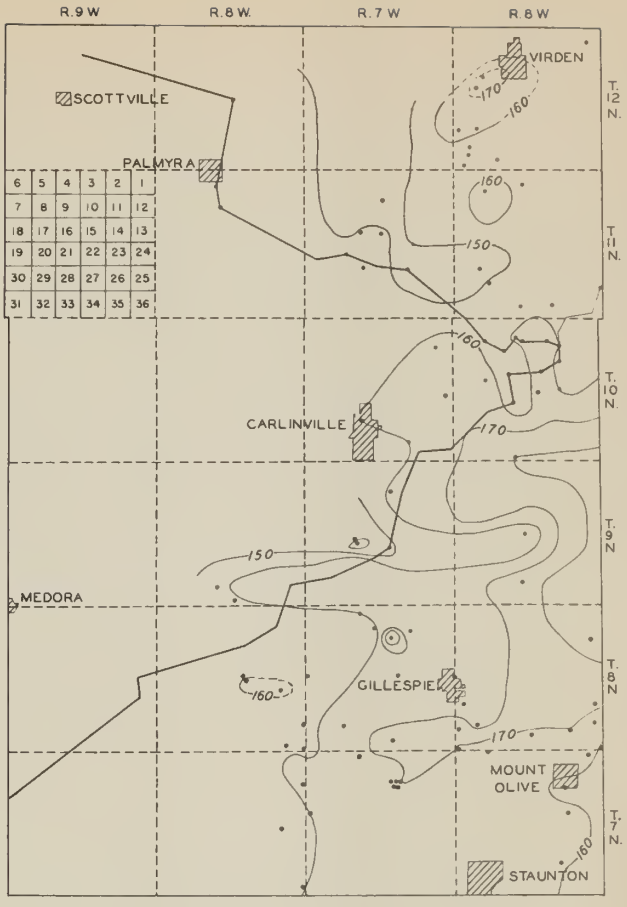
A thin bed of coal is present about 40 feet below the Scottville limestone, and another lies the same distance below the Carlinville limestone, with sandy shale beds intervening at both stratigraphic positions (pls. 1, 2, 3). This similarity of stratigraphic succession leads to confusion in interpreting the order and identity of the beds and to the possible error of correlating the Carlinville limestone with the outcropping Scottville limestone. However, the vertical distance from the Scottville limestone down to the Herrin (No. 6) coal bed is about 100 feet less than that from the Carlinville limestone down to the No. 6 bed. Furthermore, records of drill-holes which penetrated more than 200 to 225 feet of Pennsylvanian strata overlying the Herrin (No. 6) coal bed commonly show two limestones, the upper one of which is undoubtedly the Carlinville limestone, and the second about 100 feet lower. Thus, the two limestones have respectively the same relationship to No. 6 coal bed as do the Carlinville limestone near Carlinville and the Scottville limestone near Scottville. The presence of two such limestones as reported in the records of drill-holes (pls. 1, 2, 3), together with the field relationships as described, justifies differentiating these limestones as separate strata, the Scottville limestone lying about 100 feet below the Carlinville, and about 80 feet above the Herrin (No. 6) coal bed.

The distribution of outcrops of these two limestones is such that correlation of the Scottville limestone with the Carlinville limestone would require a decrease in the interval to No. 6 coal of about 100 feet within a distance of about four miles, from the vicinity of Palmyra to the vicinity of Scottville. No substantiating evidence of such convergence is known.

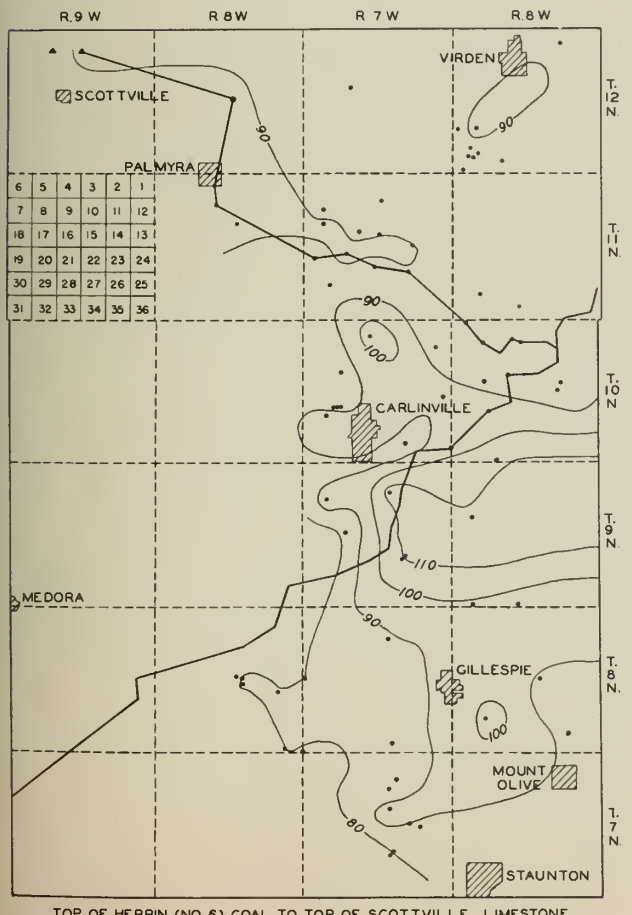
The Scottville limestone is gray to dark gray in color, fossiliferous, fine-grained, and massive. It is probably continuous between numerous outcrops in the northwest part of Macoupin County but is reported to be found only occasionally in drill-holes in the south half of the county. A thin bed of coal lying about 30 feet below the Scottville limestone, here named the Scottville coal bed, is fairly widespread throughout Macoupin County (table 1 and pls. 1, 2, 3).



TOP OF HERRIN (NO 6) COAL TO TOP OF CARLINVILLE LIMESTONE



TOP OF HERRIN (NO 6) COAL TO TOP OF TRIVOLI (NO 8) COAL



TOP OF HERRIN (NO 6) COAL TO TOP OF SCOTTVILLE LIMESTONE

FIG. 2

ISOPACH MAPS SHOWING

THICKNESS OF INTERVALS FROM

TOP OF HERRIN (NO. 6) COAL TO TOP OF CARLINVILLE LIMESTONE, TRIVOLI (NO 8) COAL, AND SCOTTVILLE LIMESTONE

IN MACOUPIN COUNTY

LEGEND

- SUBSURFACE DATUM POINT
- OUTCROP DATUM POINT
- 190 ISOPACH INTERVAL – 10 FEET
- LINE OF CROSS-SECTIONS, PLATES 1 AND 2
- APPROXIMATE BOUNDARY OF THE CARLINVILLE LIMESTONE

SCALE

0 6 12 18 MILES

Carlinville limestone. - The name Carlinville refers to the lowest limestone in an exposure of Pennsylvanian rocks along Macoupin Creek in the SW 1/4 SW 1/4 sec. 35, T. 10 N., R. 7 W., about a mile southeast of Carlinville. The nomenclature reverts to that employed by Lee (14) inasmuch as the limestone has since been called the Shoal Creek (1 & 10).

The name Shoal Creek is reserved for what is believed to be a higher limestone that crops out along Shoal Creek in the vicinity of Breese, described by Udden in 1907 (18), and for what is thought to be the same limestone occupying the uppermost position in the succession of Pennsylvanian beds cropping out southeast of Carlinville (pl. 1). To this limestone, the name La Salle has been applied (10), but because definite proof of this inferred correlation is lacking, the present report reverts to earlier terminology (12, 14). This upper limestone at Carlinville occupies the same relative position with respect to the Carlinville limestone that was given to the Shoal Creek in the early descriptions of geology of the Illinois mining districts, as published in the bulletins of the Cooperative Mining Series, particularly that describing the coal resources of District VII (Southwestern Illinois) (12).

The Carlinville limestone in most places lies from 180 to 200 feet above the Herrin (No. 6) coal bed and about 35 to 40 feet above a thin bed of coal which has been designated Trivoli (No. 8) (20) (pls. 1-3). This limestone member is well exposed by erosion south and southeast of Carlinville, east of Palmyra, and in quarries and along streams north of Plainview. It is reported commonly in records of drill-holes located east of R. 8 W., was encountered in relatively few drill-holes in R. 8 W., and is not reported farther west (table 1 and fig. 2).

Macoupin coal and limestone beds. - The Macoupin (10 & 20) coal bed is a thin layer of coal, generally less than 6 inches thick, that lies 230-250 feet above the Herrin (No. 6) coal bed and 30-40 feet above the Carlinville limestone (pls. 1-3, table 1). Overlying the coal bed is usually a black sheety shale ("slate") above which is a thin layer of fossiliferous impure shaly limestone. This group of beds is of value as a key horizon, but it is likely to be overlooked by drillers unless they are unusually discriminating in their observations. Its identification should generally be possible in cores or in drill-cuttings that are carefully collected.

Shoal Creek limestone. - The limestone herein regarded as the Shoal Creek limestone lies 40 to 60 feet above the Macoupin limestone and as much as 335 feet above the Herrin (No. 6) coal bed, the usual distance being about 300 feet in the three southern townships of Macoupin County, and from 250 to 290 feet in the three northern townships (table 1). This limestone member is usually about 10 feet thick, in places being interbedded with shale, especially in the upper part. It is rarely penetrated in drilling except in the eastern tier of townships, where it lies immediately beneath drift, as it is the uppermost Pennsylvanian member in the area (table 1).

Structural Features of Special Interest With Respect to Coal Mining

The Herrin (No. 6) coal bed has a regional easterly dip of from 10 to 15 feet per mile. An outcrop of the coal bed in the NE 1/4 NW 1/4 sec. 15, T. 7 N., R. 10 W., (Jersey County No. 27)* has an altitude of 566 feet above sea-level, the highest known altitude of the coal bed in the area; the lowest recorded altitude is 250 feet above sea-level, in the SW 1/4 SW 1/4 SW 1/4 sec. 15, T. 18 N., R. 6 W. (Macoupin County Well No. 136). The intervening distance is about 25 miles, the average dip therefore being about 12 feet to the mile.

The eastward dip is irregular, but it rarely exceeds 15 feet per mile. In a few places, such as east of Carlinville and north of Bunker Hill, it is locally as much as 25 feet per mile. Locally anticlines, domes, terraces, and basins are present. The location and character of these structures are indicated on the structure map accompanying this report and should be carefully considered in choosing sites for mining operations.

From available information it appears that faults are rare, of small displacement and brief extension, and because they are unimportant, they have not been mapped. Small displacements of the coal bed have been observed at numerous places in the mines in the Staunton - Gillespie region, but these faults rarely affect the limestone caprock and are usually associated with lenses of gray shale ("soapstone") occurring between the black shale and the coal bed, between the black shale and the caprock, or adjacent to limestone bosses or pendants protruding downward from the caprock.

The accompanying structure map has been constructed from unevenly distributed datum points. Drilling and mining operations are concentrated in the east half of the area; hence, it is possible to delineate the structure with greater accuracy and detail in the east than in the west half. In order to eliminate the personal element so far as possible, the contours have been drawn mechanically, that is, a constant slope is assumed to exist between datum points, and the distances between contours have been scaled accordingly.

Revision of Present Map and Preparation of Maps of Other Areas

The present map is the fifth of a series of maps showing the structure of Herrin (No. 6) coal bed in southern Illinois (Circulars 24,42,58, and 71). Like the others, it is a progress map

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* County well numbers refer to map (pl. 4), tabulated well data, and well logs.

on which additions and corrections can be readily made. Because of new drilling and the occasional discovery of records of earlier drilling, it is expected that additional data will become available from time to time. It is hoped that the maps of two more areas can be completed within the next two years. These maps will delineate the structural features in most of Montgomery, Christian, Fayette, and Marion counties, and adjacent parts of Sangamon, Macon, Shelby, Effingham, Clay, Wayne, Jefferson, Washington, Clinton, and Bond counties.

Bibliography

Published information on the geology of the Pennsylvanian rocks and on the structure and occurrence of the Herrin (No. 6) coal bed and associated strata in this area may be found in the following publications:

1. Ball, John R., Some Pennsylvanian limestones of the Carlinville quadrangle, Illinois: Trans. Illinois Acad. Sci., vol. 26, p. 97, 1934.

2. Bell, A. H., Notes on oil and gas possibilities, in Payne, J. N., "Structure of Herrin (No. 6) coal bed in Madison County and western Bond, western Clinton, southern Macoupin, southwestern Montgomery, northern St. Clair, and northwestern Washington counties," Ill. Geol. Surv., Circ. 71, pp. 9-21, 1941.

3. Bement, A., Illinois coal: Illinois Geol. Survey Bull. 56, pp. 13-45, 1929.

4. _____, The Illinois coal field: Illinois Geol. Survey Bull. 16, pp. 182-202, 1914.

5. Blatchley, R. S., Oil resources of Illinois, in DeWolf, F. W., et al: "Yearbook for 1909", Illinois Geol. Surv. Bull. 16, 1910.

6. _____, Oil and gas in Bond, Macoupin, and Montgomery counties: Illinois Geol. Survey Bull. 28, 1914.

7. _____, Oil resources of Illinois with special reference to the area outside the southeastern fields: Illinois Geol. Survey Bull. 16, pp. 157, 173-176, 1910.

8. Collingwood, D. M., Oil and gas possibilities of parts of Jersey, Greene, and Madison counties: Illinois Geol. Survey Rept. Inv. No. 30, 1933.

9. Culver, H. E., Coal resources of District III (Western Illinois): Illinois Geol. Survey Coop. Mining Series Bull. 29, pp. 11-22, 51-55, 68-70, 91-94, 112-115, 1925.

10. Ekblaw, Sidney E., The question of the Shoal Creek and Carlinville limestones: Trans. Illinois Acad. Sci., vol. 25, pp. 143-145, 1933.

11. Kay, F. H. et al, Oil investigations in Illinois: Illinois Geol. Survey (in cooperation with U. S. Geol. Surv.) Bull. 31, 1915.

12. Kay, F. H., Coal resources of District VII (southwestern Illinois): Illinois Geol. Survey Coop. Mining Ser. Bull. 11, pp. 13-40, 89-101, 216-222, 1922.

13. _____, The Carlinville oil and gas field: Illinois Geol. Survey Bull. 20, pp. 81-96, 1915.

14. Lee, Wallace, Geology and mineral resources of the Gillespie-Mount Olive quadrangles: U. S. Geol. Survey Geol. Atlas, Folio 220, 1926.

15. _____, Coal in Gillespie and Mount Olive quadrangles, Illinois: Illinois Geol. Survey Bull. 30, pp. 51-59, 1917.

16. _____, Oil and gas in the Gillespie and Mount Olive quadrangles, Illinois: Illinois Geol. Survey Bull. 31, pp. 71-107, 1914.

17. Mylius, L. A., A restudy of the Staunton gas pool: Illinois Geol. Survey Bull. 44A, 23 pp., 1919.

18. Udden, Jon A., Notes on the Shoal Creek limestone: Illinois Geol. Survey Bull. 8, pp. 117-126, 1907.

19. Worthen, A. H., Geological survey of Illinois: Greene County, vol. III, pp. 122-133, 1868; Jersey County, vol. III, pp. 104-121, 1868; Macoupin County, vol. V, pp. 286-305, 1873; Morgan County, vol. IV, pp. 149-162, 1870; Sangamon County, vol. V, pp. 306-319, 1873.

20. Wanless, H. R., Pennsylvanian correlations in the Eastern Interior and Appalachian coal fields: Geol. Soc. Amer. Spec. Paper 17, pp. 93, 101, 104, 108, 1939.

21. A compilation of the reports of the mining industry of Illinois from the earliest records to the close of the year 1930: Illinois State Department of Mines and Minerals: p. 16, 1931.

22. Fifty-ninth coal report of Illinois 1940: Illinois State Department of Mines and Minerals, p. 28, 1941.

Table 1. - Tabulation of intervals between top of No. 6 coal and top of various key beds, and average thicknesses of key beds in Macoupin County.

Bed	T. 7 N., R. 6 W.				T. 7 N., R. 7 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
	(Above No. 6 coal)							
Shoal Creek ls.	301-314	306	19'	3				
Macoupin coal	217-241	233	5"	6				
Carlinville ls.	194-212	205	7'	9	202-216	209	6'	10
No. 8 coal	152-165	161	5"	5	160-175	168	5"	7
Scottville ls.					78-93	82	2'	7
Scottville coal		66	4"	1	60-71	66	6"	4
Piasa ls.	32-55	42	4'	11	35-47	41	4'	26
No. 7 coal	32-40	33	7"	9	26-36	32	1'-6"	18
Horizon of top of No. 6 coal from which measurements are made.								
	(Below No. 6 coal)							
No. 5 coal		26	Bk. sl.	1				
No. 2 coal	91-93	92	2'-3"	2	85-94	88	1'-6"	3
Medora coal	134-144	136	2'-5"	3	130-134	132	1'-6"	2
Seahorne ls.	136-138	137	2'	2	135-137	136	5'	3

Table 1. - (Continued)

Bed	T. 7 N., R. 8 W.				T. 7 N., R. 9 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
			(Above No. 6 coal)					
Shoal Creek ls.					No data			
Macoupin coal		233	Bk.sl.	1				
Carlinville ls	198-208	201	8'	3				
No. 8 coal	156-168	161	2"	3				
Scottville ls.								
Scottville coal								
Piasa ls.	35-39	37	5'	5				
No. 7 coal	18-32	21	1'-10"	5				
Horizon of top of No. 6 coal from which measurements are made.								
			(Below No. 6 coal)					
No. 5 coal								
No. 2 coal								
Medora coal		139	10'	1				
Seahorne ls.								

Table 1. - (Continued)

Bed	T. 8 N., R. 6 W.				T. 8 N., R. 7 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal(ft.)	Average interval, bed to top of No. 6 coal(ft.)	Average thickness of bed	No. datum points
			(Above No. 6 coal)					
Shoal Creek ls.	303-335	329	11'	12	300-308	304	9'	2
Macoupin coal	242-272	253	5"	12	227-249	236	3"	8
Carlinville ls.	189-235	214	8'	21	201-210	205	7'	
No. 8 coal	159-183	169	5"	10	158-185	165	3"	
Scottville ls.	82-115	95	1'	3	81-88	84	1'	4
Scottville coal	56-75	64	3"	4	62-66	63	Bk.sl.	3
Piasa ls.	32-63	47	5'	33	35-55	44	4'	14
No. 7 coal	21-47	36	1'-4"	11	26-42	33	1'5"	9
Horizon of top of No. 6 coal from which measurements are made.								
			(Below No. 6 coal)					
No. 5 coal	29-39	33	1'	3				
No. 2 coal	85-112	96	2'-6"	3		84	2'	1
Medora coal	129-138	133	1'-9"	3				
Seahorne ls.	135-148	142	1'	2				

Table 1. - (Continued)

Bed	T. 8 N., R. 8 W.				T. 8 N., R. 9 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
			(Above No. 6 coal)					
Shoal Creek ls.								
Macoupin coal	227-228	228	2"	2				
Carlinville ls.	198-202	199	6"	5				
No. 8 coal	152-165	158	7"	5				
Scottville ls.	76-82	80		7				
Scottville coal	61-69	65	3"	2				
Piasa ls.	32-46	36	5'	20		32	5'	1
No. 7 coal	16-33	26	9"	16		27	5"	1

Horizon of top of No. 6 coal from which measurements are made.

			(Below No. 6 coal)					
No. 5 coal								
No. 2 coal	80-95	87	1'-5"	8		92	1'	1
Medora coal	130-138	133	6"	6		130	4'	1
Seahorne ls.	133-140	136	9'	7		134	7'	1

Table 1. - (Continued)

Bed	T. 9 N., R. 6 W.				T. 9 N., R. 7 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
(Above No. 6 coal)								
Shoal Creek ls.	294-312	301	8'	3				
Macoupin coal	249-263	255	6"	3				
Carlinville ls.	212-228	221	6'	6	181-233	205	7'	8
No. 8 coal	154-177	166	8"	2	133-161	157	11"	5
Scottville ls.		94	5'	1	93-115	108	5'	5
Scottville coal					42-60	54	3"	5
Piasa ls.	53-68	59	6'	5	25-48	36	7'	29
No. 7 coal	29-58	56	10"	5	15-35	25	2'	10
Horizon of top of No. 6 coal from which measurements are made.								
(Below No. 6 coal)								
No. 5 coal	29-34	32	Bk.sl.	2		39		1
No. 2 coal					81-105	91	1'-3"	10
Medora coal					110-128	118	2'-5"	11
Seahorne ls.					115-147	129	5'	16

Table 1. - (Continued)

Bed	T. 9 N., R. 8 W.				T. 9 N., R. 9 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
(Above No. 6 coal)								
Shoal Creek ls.								
Macoupin coal								
Carlinville ls.								
No. 8 coal		159	3"	1				
Scottville ls.								
Scottville coal	48-66	56	5"	5				
Piasa ls.	28-38	32	4'	11		30	8'	1
No. 7 coal	14-24	16	1'-3"	3				
Horizon of top of No. 6 coal from which measurements are made.								
(Below No. 6 coal)								
No. 5 coal						107	2'	2
No. 2 coal					104-110	107	2'	2
Medora coal								
Seahorne ls.					157-160	159	10'	2

Table 1. - (Continued)

Bed	T. 10 N., R. 6 W.				T. 10 N., R. 7 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
	(Above No. 6 coal)							
hoal Creek ls.	266-288	279	10'	13	263-288	271	4'	4
acoupin coal	225-241	231	2"	13	234-241	238	5"	2
arlinville ls.	189-220	199	6'	20	196-212	203	5'	9
o. 8 coal	151-180	160	8"	14	160-166	162	3"	4
cottville ls.	82-110	90	3'	12	80-110	91	2'	10
cottville coal	40-71	56	6"	13	48-68	59	2'	10
iasa ls.	27-47	37	5'	18	25-47	33	6'	17
o. 7 coal	21-32	26	1'-5"	11	15-34	27	10"	8

orizon of top of No. 6 coal from which measurements are made.

	(Below No. 6 coal)							
o. 5 coal	20-40	30	Bk.sl.	2				
o. 2 coal	91-103	96	3'-6"	3	83-102	94	1'-9"	4
edora coal	135-146	138	1'-5"	3	114-127	118	3'-4"	6
eahorne ls.	142-157	147	6'	2	120-140	131	8'	8

Table 1. - (Continued)

Bed	T. 10 N., R. 8 W.				T. 10 N., R. 9 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
(Above No. 6 coal)								
Shoal Creek ls.								
Macoupin coal								
Carlinville ls.								
No. 8 coal								
Scottville ls.								
Scottville coal		51		1				
Piasa ls.		32	8'	1				
No. 7 coal								
Horizon of top of No. 6 coal from which measurements are made.								
(Below No. 6 coal)								
No. 5 coal								
No. 2 coal								
Medora coal								
Seahorne ls.		136	6'	1				

Table 1. - (Continued)

Bed	T. 11 N., R. 6 W.				T. 11 N., R. 7 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
	(Above No. 6 coal)							
Shoal Creek ls.	238-265	249	8'	4				
Macoupin coal	201-226	213	0'-6"	2				
Carlinville ls.	173-200	185	4'	7	179-192	187	4'	6
No. 8 coal	132-167	154	1'-0"	7	138-153	149	8"	7
Scottville ls.	82-88	85	1'-4"	2	85-92	89	4'	9
Scottville coal	39-64	53	0'-4"	6	41-55	49	9"	9
Piasa ls.	26-35	31	5'	8	26-32	29	3'	8
No. 7 coal	10-30	22	1'-2"	8				
Horizon of top of No. 6 coal from which measurements are made.								
	(Below No. 6 coal)							
No. 5 coal	25-37	31	0'-6"	2				
No. 2 coal		90	2'-0"	1		91	Bk.sl	1
Medora coal		135	2'-0"	1				
Seahorne ls.		143	7'	1		143	3'	1

Table 1. - (Continued)

Bed	T. 11 N., R. 8 W.				T. 11 N., R. 9 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
(Above No. 6 coal)								
Shoal Creek ls.								
Macoupin coal								
Carlinville ls.	186-194	187	2'	2				
No. 8 coal	157-158	158	4"	2				
Scottville ls.	93-100	97	5'	3				
Scottville coal	61-67	64	5"	3				
Piasa ls.	32-36	34	3'	2				
No. 7 coal		19	7"	1				
Horizon of top of No. 6 coal from which measurements are made.								
(Below No. 6 coal)								
No. 5 coal		25	Bk.sl.	1				
No. 2 coal		82	1'-6"	1				
Modora coal	118-125	121	1'-4"	2				
Seahorne ls.	120-131	124	8'	3				

Table 1. - (Continued)

Bed	T. 12 N., R. 6 W.				T. 12 N., R. 7 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal(ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
			(Above No. 6 coal)					
Shoal Creek ls.	248-270	258	9'	4				
Macoupin coal	224-248	233	0'-2"	4				
Carlinville ls.	166-205	181	5'	3				
No. 8 coal	136-168	158	0'-10"	11				
Scottville ls.	77-94	84	2'-6"	9		81	6'-6"	1
Scottville coal	32-49	40	0'-5"	4				
Piasa ls.	30-36	32	5'	11		40	3'-6"	1
No. 7 coal	24-29	27	1'-2"	3				
Horizon of top of No. 6 coal from which measurements are made.								
			(Below No. 6 coal)					
No. 5 coal		21	Bk.sl.	1				
No. 2 coal		94	Bk.sl.	1		95	Trace	1
Medora coal		136	Bk.sl.	1				
Seahorne ls.		148	2'	1		132	13'	1

Table 1. - (Concluded)

Bed	T. 12 N., R. 8 W.				T. 12 N., R. 9 W.			
	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points	Range of interval, bed to top of No. 6 coal (ft.)	Average interval, bed to top of No. 6 coal (ft.)	Average thickness of bed	No. datum points
(Above No. 6 coal)								
Shoal Creek ls.								
Macoupin coal								
Carlinville ls.								
No. 8 coal		160	1'-00"	1				
Scottville ls.	88-91	89	6'	2	88-96	92	4'	2
Scottville coal		53	3'-00"	1	60-63	62	0'-10"	2
Piasa ls.	33-39	36	3'	2	24-38	31	3'	3
No. 7 coal								
Horizon of top of No. 6 coal from which measurements are made.								
(Below No. 6 coal)								
No. 5 coal								
No. 2 coal		86	1'-00"	1				
Medora coal		130	4'-00"	1				
Seahorne ls.		136	7'	1				

Table 2. - Compilation of intervals between top of Herrin (No. 6) coal and tops of Scottville limestone, Trivoli (No. 8) coal, and Carlinville limestone in Macoupin County. (To accompany fig. 2)

Location				Interval from top of No. 6 coal to top of		
Twp.	Rge.	Sec.	County number	Scottville limestone	Trivoli (No. 8) coal	Carlinville limestone
7N	6W	1H5	358			212
7N	6W	1H6	255		162	204
7N	6W	5H7	234		165	205
7N	6W	6E5	411			208
7N	6W	11D5	258		152	194
7N	6W	14D5	362		165	208
7N	6W	17D6	236			209
7N	6W	26C6	239		162	205
7N	6W	35D5	240			200
7N	7W	4G8	188		168	210
7N	7W	8A8	189			205
7N	7W	9E4	190			215?
7N	7W	10D3	195			216
7N	7W	10D4	199	82	167	209
7N	7W	10E2	197		173	
7N	7W	10E3	194			204?
7N	7W	10E3	196		168	
7N	7W	10E3	198		175	214
7N	7W	10E4	200		168	210
7N	7W	10H2	193	84		
7N	7W	12E7	202			209?
7N	7W	14A6	292	90		
7N	7W	15F5	387	93		
7N	7W	18E7	209		160	202
7N	7W	23H3	211	86		
7N	7W	27G5	224	78		
7N	7W	27H4	223	83		
7N	8W	12F1	178		168	205
7N	8W	24G8	182		156	198
7N	8W	36D1	187		159	200
8N	6W	4A8	285			224
8N	6W	8F1	452			215
8N	6W	8G1	286			213
8N	6W	9G8	132			235
8N	6W	11C4	134			224
8N	6W	12E4	135		183	223
8N	6W	15A4	136	88		

(Continued on page 22)

Table 2. - (Continued)

Location				Interval from top of No. 6 coal to top of		
Twp.	Rge.	Sec.	County number	Scottville limestone	Trivoli (No. 8) coal	Carlinville limestone
8N	6W	18A2	138			214
8N	6W	18C6	288			215
8N	6W	19G6	139			210
8N	6W	20A6	289			205
8N	6W	25A2	322		166	215
8N	6W	25H3	140		172	217
8N	6W	28D5	141			210
8N	6W	29D7	142	115?		
8N	6W	29G4	143			215
8N	6W	30A1	144		168	207
8N	6W	30H6	145		167	213
8N	6W	31A8	147		169	213
8N	6W	31H8	146		173	219
8N	6W	34F8	148		168	211
8N	6W	35G3	149	82	169	210
8N	6W	36A1	324		159	189
8N	7W	4A3	152		159	201
8N	7W	4F7	151		160	202
8N	7W	10F5	153	88	185	208
8N	7W	11H7	154		161	202
8N	7W	13A1	315		160	
8N	7W	13E4	156			207
8N	7W	13F4	155			210
8N	7W	15A3	157		162	204
8N	7W	18A8	158	80?	158	
8N	7W	23A2	290			203
8N	7W	25G1	159			201
8N	7W	25G2	163			206
8N	7W	29A4	160		167	204
8N	7W	32D5	161			203
8N	7W	34D4	162	85	172	208
8N	8W	14F2	168			202
8N	8W	15A5	455	80	152	
8N	8W	15B7	323	77		
8N	8W	22H4	457	82	165	
8N	8W	23E1	169	81	161	199
8N	8W	25A1	170		158	198
8N	8W	36A1	172	75?	154	199
8N	8W	36B6	173	80	158	198
9N	6W	18F1	125	112		233
9N	6W	21H1	127		154	218
9N	6W	30D1	128			214
9N	6W	31A1	129	98		212
9N	6W	32G1	130			227
9N	6W	33A2	131	94		228

(Continued on page 23)

Table 2. - (Continued)

Location				Interval from top of No. 6 coal to top of		
Twp.	Rge.	Sec.	County number	Scottville limestone	Trivoli (No. 8) coal	Carlinville limestone
9N	6W	33H2	150		177	224
9N	7W	7D1	463	93?		
9N	7W	10C1	296		161	
9N	7W	10F1	112			200
9N	7W	10F5	111	115		195
9N	7W	17A3	116	81		
9N	7W	21E7	275		135?	
9N	7W	21F8	280		142?	
9N	7W	22D5	122		148	181
9N	7W	23A8	123	111		195
9N	7W	23A8	448	107		197?
9N	7W	28H4	283			210
9N	7W	29B8	124			214
9N	7W	34H8	284			208
9N	8W	33G5	88		159	
9N	8W	34A8	341		157	193
10N	6W	2C5	443			190
10N	6W	4A4	45	87	161	192
10N	6W	6H3	46	86		
10N	6W	8H5	47	82	157?	199
10N	6W	9E7	48		155	195
10N	6W	9H1	49	86	161	194
10N	6W	10H1	50		161	192
10N	6W	11A4	51		152	189
10N	6W	11G5	52		160	194
10N	6W	12B7	445			192
10N	6W	14C4	53	86		205
10N	6W	15E4	54		162	204
10N	6W	16E6	55	85	157	200
10N	6W	17C5	56	88	164	199
10N	6W	20A4	61	93		204
10N	6W	21E4	58		151	190
10N	6W	22G4	59		164	204
10N	6W	23H5	60	83?	160	199
10N	6W	30D1	62	98		212
10N	6W	32A1	63	102		214
10N	6W	33A4	64	110	180	220
10N	7W	4B3	65	102		
10N	7W	12E5	68	86	162	205
10N	7W	13D7	69			196
10N	7W	17H4	70	85		
10N	7W	20C5	332	85		
10N	7W	20C6	334	87		
10N	7W	20C6	336	80		

(Continued on page 24)

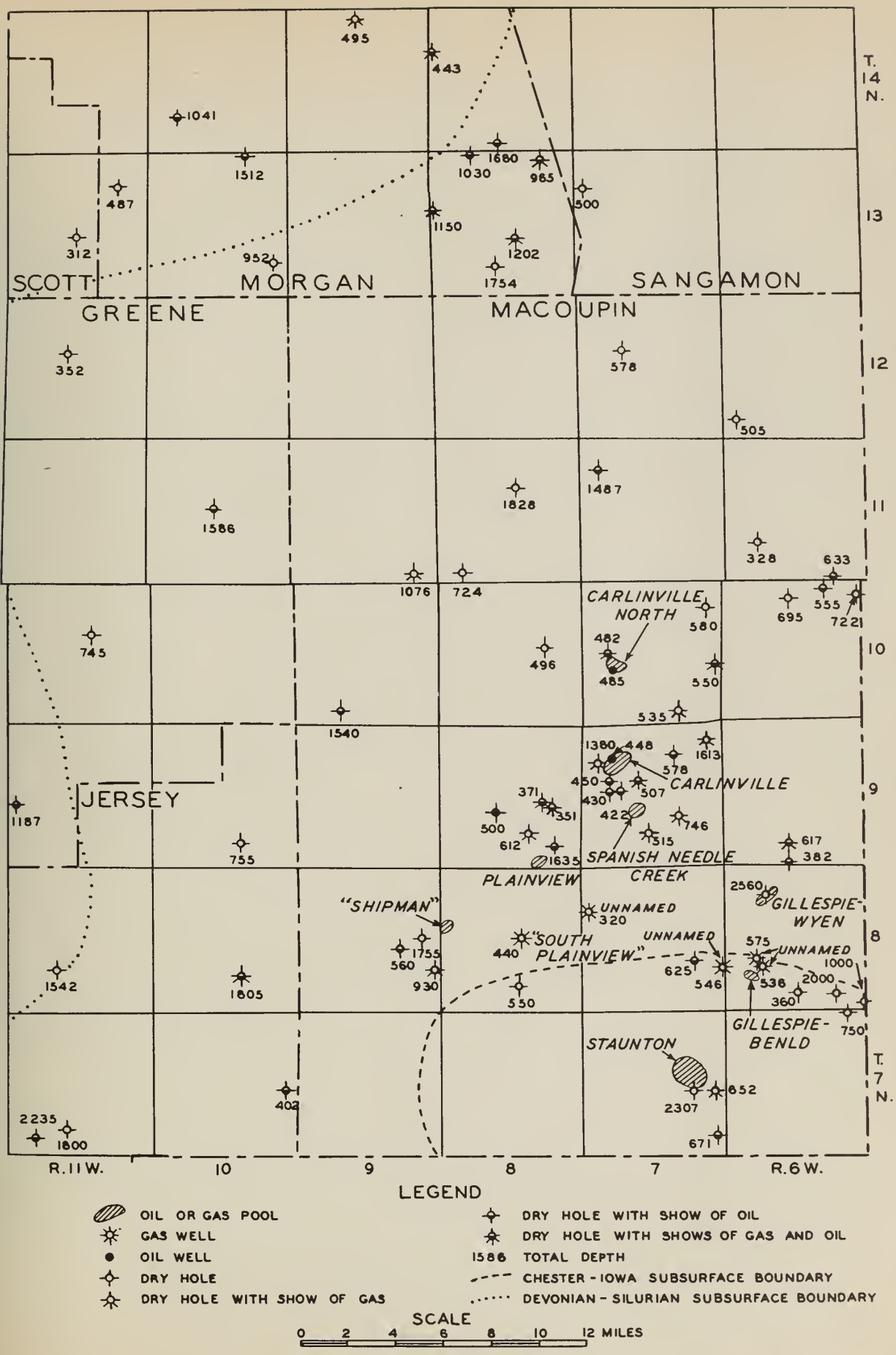
Table 2. - (Continued)

Location				Interval from top of No. 6 coal to top of		
Twp.	Rge.	Sec.	County number	Scottville limestone	Trivoli (No. 8) coal	Carlinville limestone
10N	7W	24D2	72			201
10N	7W	24G4	73	93	116	203
10N	7W	25F6	74			210
10N	7W	28F7	3		160	
10N	7W	30H1	446	110		
10N	7W	34B7	76			200
10N	7W	35F7	78	85		200?
10N	7W	35G8	79		161	203
10N	7W	36E1	81	97		212
11N	6W	4E2	33		154	175
11N	6W	5B7	244		167	
11N	6W	20A8	36		132	186?
11N	6W	25B1	38		158	180
11N	6W	29E5	39		153	
11N	6W	30A1	41	88		
11N	6W	33E3	42	82	157	183
11N	6W	34E1	43		159	185
11N	6W	35A4	442			200
11N	6W	36B4	44			190
11N	7W	7E1	502	87		
11N	7W	10G7	22	85	144	179
11N	7W	14A6	23	90	150	
11N	7W	15E8	24	89	152	186
11N	7W	16E6	25	88	151	190
11N	7W	18H3	57	91		
11N	7W	19E5	26	86?		
11N	7W	20E3	27	92	153	192
11N	7W	21B1	28	87	151	192
11N	7W	23A7	29	88	138	183
11N	7W	29D8	31	83		
11N	8W	4E4	19	99	157	194
11N	8W	9F4	20	100	158	180
11N	8W	15H6	342	93?		
12N	6W	2D4	1		145	
12N	6W	2D6	2	88		
12N	6W	8A7	241		175?	
12N	6W	18E1	4		175?	
12N	6W	30A3	8	88	155	
12N	6W	30H1	7	94	161	171?
12N	6W	30H7	5	87	168	
12N	6W	31B5	6	82	153	205
12N	6W	31F2	10	80		
12N	6W	31F3	9	77	158?	
12N	6W	31H1	11	80	158	

(Continued on page 25)

Table 2. - (Concluded)

Location				Interval from top of No. 6 coal to top of		
Twp.	Rge.	Sec.	County number	Scottville limestone	Trivoli (No. 8) coal	Carlinville limestone
12N	6W	32E1	12	83	154	
12N	7W	17E1	305	81		
12N	8W	15B7	15	91	160	
12N	9W	3	Outcrop	96		
12N	9W	4 to 10	Outcrop	88		



LEGEND

- OIL OR GAS POOL
- GAS WELL
- OIL WELL
- DRY HOLE
- DRY HOLE WITH SHOW OF GAS
- DRY HOLE WITH SHOW OF OIL
- DRY HOLE WITH SHOWS OF GAS AND OIL
- 1586 TOTAL DEPTH
- CHESTER - IOWA SUBSURFACE BOUNDARY
- DEVONIAN - SILURIAN SUBSURFACE BOUNDARY

SCALE

0 2 4 6 8 10 12 MILES

FIG. 3 – INDEX MAP SHOWING OIL AND GAS DEVELOPMENT IN THE AREA

OIL AND GAS POSSIBILITIES

By

WILLIAM H. EASTON

Introduction

This summary of oil and gas development and possibilities is based on the structural features of coal No. 6. Prospecting is recommended in several areas but is discouraged in other areas in which proof of closure is lacking. There may be small amounts of oil or gas along anticlines that have small unrevealed closure, but the amounts are not likely to be commercial.

Most of the drilling has been in the form of coal tests, many of which entered the lower Pennsylvanian sandstones. There are no records of some of the coal tests or of more numerous oil and gas tests that were drilled years ago. Moreover, it is not possible to check up on production of all wells or pools. In the following report, the records of wells are used as reported to the Geological Survey; some records of shows of oil and gas are probably omitted and some reports of shows may be inaccurate, but in any case, the available information is reviewed herein for the benefit of the industry.

Possible Producing Formations

Possible producing formations in the region are ten in number, namely: (1) Pennsylvanian sandstones, (2) Chester sandstones, (3) McClosky limestone, (4) St. Louis limestone, (5) Salem limestone, (6) Burlington-Keokuk limestones, (7) Devonian limestone, (8) Niagaran dolomites, (9) "Trenton" limestone, and (10) Ordovician sandstones and dolomites below the "Trenton".

Only the Pennsylvanian system has been extensively or successfully prospected in the area. Production from the Pennsylvanian has come from sandstone strata in the lower part of the system. These strata have been formerly referred to as Pottsville, but are now known to represent several other groups of the Pennsylvanian system.

The Chester sandstones, which produce oil in central and southeastern Illinois, are restricted chiefly to the southeast corner of the area where they are thin. They are also probably

represented by thin deposits left as residual outliers by pre-Pennsylvanian erosion. Because Chester strata are thin, irregularly distributed, and close to the surface, they are thought not likely to produce oil or gas in the area.

The McClosky limestone, which is very productive in the Illinois basin, is a possible producing formation in part of this area, especially in the southeast portion where it has a greater cover of sediments. No shows of oil or gas have been reported to date in the McClosky in this area. Outside the area of Chester sediments, it is likely to be absent, owing to pre-Pennsylvanian erosion.

One well (Macoupin County well No. 462) had a show of gas in the St. Louis limestone. The Salem limestone is the producing formation in the Jacksonville gas field in Morgan County. Shows are reported from the Burlington-Keokuk limestones in one well.

The Devonian limestone is absent in the northwest part of the area. It produces in the Sorento pool in northwestern Bond County. The Niagaran limestones and dolomites are overlain directly by Pennsylvanian strata in the northwest part of the area. Shows of gas have been reported from the "Niagaran" in the area, and it is the producing formation in the Pittsfield gas field in Pike County.

The "Trenton" limestone is the oldest producing formation in Illinois. The discovery of very good "Trenton" production near St. Jacob in southeastern Madison County in July 1942 makes the prospects of other areas in western Illinois look more favorable. It should be noted, however, that "Trenton" structural "highs" may not extend into younger beds because such "highs" may have been formed before the younger beds were deposited. Shows of oil were reported in Lower Ordovician beds in one well (Jersey County well No. 5).

Structural Features

The names of the geological structures (pl. 4) used in this report are listed below, with a note as to whether the name is old or new.

1. Staunton dome (old)
2. Anderson anticline (new)
3. Burton anticline (new)
3A. Carlinville North dome (new)
4. Carlinville anticline (old)
4A. Carlinville dome (old)
5. Grimes anticline (new)
6. Hickory Grove anticline (new)
6A. Macoupin dome (old)
6B. Spanish Needle Creek dome (old)
7. Lowder anticline (new)

8. Modesto anticline (new)
9. Nilwood anticline (new)
10. Plainview syncline (new)
11. Shipman anticline (new)
12. South Litchfield dome (old)
13. Thayer dome (new)
14. Waverly anticline (new)
15. Weyen anticlinal nose (new)

The discussion of oil possibilities in T. 7 S., Rs. 6, 7, 8, and 9 W., is given in Circular 71, pp. 9 and 12, and is quoted below. The present map omits the small closing contour formerly shown in sec. 14, T. 7 N., R. 8 W.; other slight shifting of contours is too minor to warrant discussion.

"(1) Staunton dome, sec. 14 and adjacent secs., T. 7 N., R. 7 W., Macoupin County.

"The Staunton dome is described in: Bulletin 28, p. 41; Mining Investigations Bulletin 11, p. 37; and Bulletin 44A. A gas field which produced for three years from 1916-1919 was located on this dome. Production was from Pennsylvanian sandstone, and the average depth to top of pay in 18 gas wells was 461 feet. Average thickness of pay was 30 feet. The deepest well on the structure, drilled in 1931, had a depth of 2371 feet and tested the 'Trenton' limestone.

"The fact that mine levels were used in the **** structural interpretation insures a greater degree of accuracy than was possible in previous maps.

"The dry hole to the 'Trenton' has undoubtedly discouraged further test-drilling for oil or gas on the Staunton dome."

2. Anderson anticline. - The Anderson anticline, named from Anderson School in the SE corner sec. 2, T. 10 N., R. 7 W., is a mild warping at Modesto and terminates about three miles south of South Standard. It has not been tested to the lower Pennsylvanian, although several coal tests have been drilled on it. Drilling is not recommended because the structure has no closure.

3. Burton anticline. - The Burton anticline, named from the Burton School in the NW 1/4 sec. 34, T. 10 N., R. 7 W., is terminated at the west by the Carlinville North dome and extends eastward about five miles in an arc between the Anderson anticline and the Carlinville anticline.

Two wells in sec. 35 had gas shows, one (Macoupin County No. 77) had gas in shale and sand at 395-405 feet, and the other (Macoupin County No. 78) had a show in shale from 407-413 feet. The well in sec. 24 (Macoupin County No. 72) had a possible

show of gas below 547 feet and a very slight show of oil at 550 feet (total depth). Without known closure, further drilling along this anticline does not seem advisable.

3A. Carlinville North dome. - The Carlinville North dome, named for the Carlinville North pool, lies one mile northwest of Carlinville, occurring at and near the common corner of secs. 17, 18, 19, and 20, T. 10 N., R. 7 W.

Production has been obtained from the east flank of the dome in secs. 17 and 20. Oil, with which some gas occurs, is obtained from the lower Pennsylvanian at about 500 feet. The well in sec. 17 (Macoupin County No. 71) was drilled in 1913, and at least one well was drilled in 1921. The recent drilling began late in 1941, and there were three producing and eight abandoned oil wells in July 1942. This pool was formerly included with the Carlinville pool, according to Blatchley (Bull. 28, p. 11), who reported one well to have made 100 barrels daily.

4. Carlinville anticline. - The Carlinville anticline extends from northwest of Chesterfield eastward to southeast of Carlinville, then swings north to about four miles south of South Standard. In secs. 11, 14, 10, and 15, T. 9 N., R. 7 W., is a fairly sharp nose without known reversal of dip. A coal test (Macoupin County No. 296) did not reach the lower Pennsylvanian. The broad "high" at the east end of the Carlinville anticline in and about secs. 32 and 33, T. 10 N., R. 6 W., secs. 4 and 5, T. 9 N., R. 6 W., has not been tested by any well reaching the lower Pennsylvanian. Doming or reversals of dip are not known but may occur. This is a possible producing area, but not enough data are available to suggest a location.

4A. Carlinville dome. - The Carlinville structure was first mentioned as an anticline in 1910 by Blatchley (Bull. 16, p. 161) who discussed the finding of gas in the Carlinville field. Kay reviewed the Carlinville field in 1911 and presented a partial structure map (Bull. 20, pl. VIII). The Carlinville field was mentioned by Lee (U.S.G.S. Gillespie-Mt. Olive folio) as being on a dome, here designated the Carlinville dome. It has long been known to have about 20 feet of closure.

The most comprehensive discussion of the Carlinville pool to date is in Bulletin 31, pp. 91-99. Drift gas, discovered in the "early sixties," led to the discovery of gas in the lower Pennsylvanian strata in 1909 and oil in the lower Pennsylvanian in 1911. The gas had an initial pressure of 135 pounds; the oil had a specific gravity of 28.6°B. Although the pool was abandoned in 1925, it is now producing again from three wells and a fourth well is being cleaned out.

5. Grimes anticline. - The Grimes anticline, named from Grimes School in the NW corner sec. 11, T. 8 N., R. 7 W., extends in an arc from Shipman to just north of Gillespie. Although gas was obtained at Shipman in 1907, it was not until January of 1942 that further drilling was done. The first well of the three (as of

July 1942) in sec. 18, T. 8 N., R. 8 W., made 1 1/2 million cubic feet per day from the lower Pennsylvanian, the top of which lies at 365 feet below the surface.

Lee mentioned a possible dome (Bull. 31, p. 105) in the N 1/2 sec. 10, T. 8 N., R. 8 W., but the structure is not indicated by the present map. He also suggested that a slight upward warping may exist somewhere near the corner of secs. 3 and 4, T. 8 N., R. 7 W., and 33 and 34, T. 9 N., R. 7 W. (Bull. 31, p.105) but it is not supported by this map.

The Holmes - Watkins well in sec. 23, T. 8 N., R. 9 W., had two shows of oil from 430-433 feet and 450-455 feet in the Lower Mississippian, topped at 418 feet. The W. R. Holmes and Graham - Kulenkamp No. 1, NW 1/4 SE 1/4 SW 1/4 sec. 7, T. 8 N., R. 8 W., made 150,000 cubic feet of gas from the lower Pennsylvanian, which was topped at 314 feet.

Without indication of closure, further drilling is not warranted in this region.

6. Hickory Grove anticline. - The general anticline on which the Spanish Needle Creek and the Macoupin domes lie is called the Hickory Grove anticline, named from Hickory Grove School in the center E 1/2 sec. 28, T. 9 N., R. 6 W. It extends east-southeastward from the common corner of Greene, Jersey, and Macoupin counties at least to the center of the east edge of T. 9 N., R. 6 W. The west end is more like an anticlinal nose, but there is a sharpening of the structure in secs. 21, 26, and 27, T. 9 N., R. 8 W., which has been partially tested; this is discussed below under the name Macoupin dome.

Eastward from the Spanish Needle Creek dome the Hickory Grove anticline becomes broader. The well in the SW corner of sec. 23, T. 9 N., R. 7 W. (Macoupin County No. 148) had a small show of gas at 474 feet (lower Pennsylvanian?) and gas shows at 508 feet (lower Pennsylvanian) and 644 feet (Lower Mississippian limestone, top 628 feet). Of the two wells in sec. 33, T. 9 N., R. 6 W., one (Macoupin County No. 131) had a slight show of oil from 115-127 feet (lower Pennsylvanian); the other (Macoupin County No. 150) had a good show of gas at 596-605 feet, a show of oil at 605-610 feet, and shows of gas and oil at 610-615 feet, all in the lower Pennsylvanian. It is possible that a well drilled up-dip in the E 1/2 sec. 29, or in the W 1/2 sec. 28, T. 9 N., R. 6 W., would be more favorably located for obtaining commercial production of gas and oil. A reasonable location for a test well is in the center of the NW 1/4 sec. 28, T. 9 N., R. 6 W. The lower Pennsylvanian, which includes the most favorable possible producing horizon, lies at about 580 feet.

6A. Macoupin dome. - The Macoupin dome has been described (Bull. 31, p. 104). It lies mainly in secs. 26 and 27, T. 9 N., R. 8 W., and is elongated east-west. The area including this dome was mentioned in the Gillespie-Mt. Olive folio, p. 9, as probably a region of warped strata. The Impromptu - Rinaker and

Benson well in sec. 27 (Macoupin County No. 87) had a show of gas at from 425-430 feet in the lower Pennsylvanian. The Ohio - Mutzbauer well No. 1 (Macoupin County No. 84) in sec. 23 had a light showing of oil at 343 feet and a gas show at 322 feet, both in the Pennsylvanian. (This well is mentioned in Bull. 31, p. 104, as being one mile northwest of the bridge in the NE corner sec. 27, which would place it in sec. 22; apparently northeast was meant instead of northwest). The Macoupin dome is not yet adequately tested. For further testing, the S 1/2 NW 1/4 sec. 26, T. 9 N., R. 8 W., would be the most reasonable location because it would be higher than the other well (Macoupin County No. 87) to the west which gave a show of gas. The lower Pennsylvanian there lies at about 400 feet. Present studies indicate that the dome has about ten feet of closure on the Herrin (No. 6) coal.

6B. Spanish Needle Creek dome. - The Spanish Needle Creek dome as originally described (Bull. 31, p. 102), was located in the NE 1/4 SW 1/4 sec. 21, T. 9 N., R. 7 W., but more recent data indicate that the crest lies in the SE 1/4 NW 1/4 sec. 21. The dome was mentioned in the Gillespie - Mt. Olive folio, p. 9. A subordinate "high" in sec. 28 is not substantiated by present data; also the axis of the structure trends nearly east-west instead of northwest-southeast.

Production on the Spanish Needle Creek dome was from the lower Pennsylvanian sandstones. The deepest well (Macoupin County No. 281) on the dome is the W. E. Schmidt et al (Hercules Oil and Gas) - Miller No. 1, which was dry and abandoned at a total depth of 545 feet but was still in the Pennsylvanian. The field was discovered in 1915 (the same year its structure was pointed out by Lee) and was abandoned in 1934. One well is reported to have made 3 million cubic feet of gas per day. (Gillespie-Mt. Olive folio, p. 13).

No deep test has been made on the dome. There are no Chester strata within the area of the Spanish Needle Creek dome, hence possible deeper production would have to come from rocks of early Mississippian age or older. Probably the dome is too small to justify such deep drilling.

7. Lowder anticline. - The Lowder anticline, named for the town, lies between the Waverly anticline and the Modesto anticline. It is in line with the Thayer dome and appears to be a branch of the Waverly anticline. No tests have been made on the Lowder anticline. Until evidence of doming can be substantiated, further drilling does not appear advisable.

8. Modesto anticline. - The Modesto anticline, named for the town, extends from the northwest corner of Macoupin County, through Modesto and then eastward to the northeast corner of the county.

There has been only one important well drilled on this anticline, and that is the O. G. Hayes - Alderson No. 1 (Macoupin

County No. 305) in sec. 17, T. 12 N., R. 7 W. The well ended in the St. Louis limestone, topped at 563 feet, but no shows of oil or gas were reported.

There is no present indication of closure on the anticline, hence prospecting is not recommended.

9. Nilwood anticline. - The Nilwood anticline, named for the town, extends from about two miles northwest of Nilwood in an arc to the south, to about two miles south-southeast of South Standard. The south end of the Nilwood anticline is in line with the trend of the Carlinville anticline.

The coal test in sec. 29, T. 11 N., R. 6 W., did not test the lower Pennsylvanian sandstones. In secs. 4 and 9, T. 10 N., R. 6 W., several coal tests have been drilled but only one (Macoupin County No. 49) tested the lower Pennsylvanian sandstones. There were no shows reported, and the well was completed in the St.Louis limestone at 695 feet.

To the east of the latter region, two wells had shows of oil, one (Macoupin County No. 442) in sec. 35, T. 11 N., R. 6 W., and the other (Macoupin County No. 443) in sec. 2, T. 10 N., R. 6 W., which produced a little oil but is temporarily abandoned.

There is no known reversal of dip on the Nilwood anticline, but additional data may prove the presence of one or more domes. The presence of anticlinal noses along the east margin of the structure might be an indication of the presence of domes updip. Recommendations for drilling cannot be made.

10. Plainview syncline. - The Plainview syncline, named for the town, extends completely across Macoupin County between the Hickory Grove anticline and the Grimes anticline and has an east-west trend, plunging eastward. It has a closed low spot in sec. 34, T. 8 N., R. 9 W.

The Plainview gas field lies in sec. 35, immediately east of the closed low. Production is from the lower Pennsylvanian sandstones. One well made 1 1/2 million cubic feet per day.

No closure is known, hence further drilling is not warranted at present.

11. Shipman anticline. - The Shipman anticline, named for the town, extends from Shipman to Mount Olive. At the west end of the anticline in sec. 25, T. 8 N., R. 9 W., is located the well (Macoupin County No. 175) which was reported as having had a show of gas (Bull. 16, p. 176). The gas was encountered at 418 feet in the Lower Mississippian.

In secs. 15 and 22, T. 8 N., R. 8 W., is a small gas field which produced from the lower Pennsylvanian. Although not

specifically named, it is sometimes called the South Plainview field. Two wells entered the Lower Mississippian but no deep tests were drilled, the deepest being 550 feet.

The Gillespie - Benld gas field is in secs. 29 and 30, T. 8 N., R. 6 W. Production was from the lower Pennsylvanian sandstones. The number of wells drilled is not known, but there were reported to be at least three producing gas wells and one dry hole. The production of one well (Macoupin County No. 143) was reported to be 5 million cubic feet of dry gas per day from 536 feet (lower Pennsylvanian) at 155 pounds pressure. The field had been partially drilled by 1923 and was abandoned in 1935. The structure has been indicated in Bulletin 31, pl. II, on the Gillespie quadrangle geologic map, and on page 9 in the Gillespie-Mt. Olive folio.

In secs. 20, 29, 32, 33, and 34, T. 8 N., R. 6 W., there are five small domes. The one of these which is mostly in sec. 20, has been tested (Macoupin County No. 289) by a gas well completed in 1931, production coming from the lower Pennsylvanian at 565-575 feet. The field was not named because of its small size. The amount of gas obtained is not known.

Of the other domes, the east one (in secs. 33 and 34) has had a coal test (Macoupin County No. 148) drilled on it which did not reach the lower Pennsylvanian, having only gone to 361 feet. Another very small dome in sec. 23, T. 8 N., R. 7 W., has had a nearby test (Macoupin County No. 290) which had a show of oil at 595 feet in the lower Pennsylvanian. These low domes may contain gas in the lower Pennsylvanian, although it is impossible to know whether or not the gas would be in commercial quantities. The fact that production was obtained in the Gillespie - Benld gas field nearby is somewhat encouraging. If the small domes are drilled, the most favorable locations are the NW 1/4 SE 1/4 SE 1/4 SE 1/4 sec. 23, T. 8 N., R. 6 W., the SE 1/4 NW 1/4 NE 1/4 sec. 32, the center of the E 1/2 sec. 32, the NE 1/4 SW 1/4 NE 1/4 sec. 33, and the center of the S line sec. 32, all in T. 8 N., R. 6 W. The lower Pennsylvanian sandstones, which would be the most probable producing formations, lie about 250 feet below coal No. 6, or about 660 feet deep in secs. 32 and 33.

12. South Litchfield dome. - The South Litchfield dome was described (Bull. 31, p. 103) as occurring partly in sec. 25, T. 8 N., R. 6 W., but the west portion which should occur on this map does not appear from the data at hand. The coal test (Macoupin County No. 140) in sec. 25 went to 444 feet and reported no shows of oil or gas.

13. Thayer dome. - The Thayer dome, named for the town, occupies most of sec. 2, parts of secs. 1 and 3, T. 12 N., R. 6 W., and parts of secs. 34 and 35, T. 13 N., R. 6 W. It is probably an extension of the trend of the Lowder anticline.

The Thayer dome has not been tested, as the coal borings on it are all shallow holes. The structural conditions are similar

to those in the Staunton gas field farther south, but the Chester series is absent on the Thayer dome. The chances of obtaining production from the lower Pennsylvanian seem good. The first test well should be drilled in the center of the SE 1/4 NW 1/4 sec. 2, T. 12 N., R. 6 W., in order to place it at the highest point of the structure. The top of the lower Pennsylvanian is probably about 200 feet below coal No. 6, or about 580 feet deep.

A mile and a half west of the Thayer dome is a structural depression which underlies the north part of Virden.

14. Waverly anticline. - The Waverly anticline, named for the town, extends from Waverly at least to Auburn. Near Waverly, in sec. 2, T. 13 N., R. 8 W., a well (Morgan County No.18) had a gas show from 324-347 feet in the Pennsylvanian and good shows of oil at 800 feet, and from 912-965 feet in the Keokuk-Burlington. Other than the well (Sangamon County No. 20) in sec. 7, T. 13 N., R. 7 W., which did not report any shows, the anticline has not been tested. A sharpening of the structure at Auburn is the next most significant structural feature on the anticline. Examples of closure are not known, hence recommendations for drilling cannot be made at this time.

15. Weyen anticlinal nose. - The Weyen anticlinal nose, named for the old gas production on the Weyen farm, lies chiefly in secs. 8 and 9, T. 8 N., R. 6 W., between the Hickory Grove anticline and the Grimes anticline. It is somewhat in line with the Grimes anticline and may be structurally related to it. The structure is small and appears to have been adequately drilled.

The Gillespie - Wyen oil pool was drilled in secs. 4, 8, and 9, sometime between 1910 and 1915 and was productive at least during 1930-1936, after which time it was abandoned until August 1941. There were seven producing wells and others were scheduled to be cleaned out in July 1942. Only 12 wells are known, although it is said that there were once about 22 wells in the pool. Eleven of them were producers and two of the producers were abandoned shortly after completion, leaving nine commercial wells in the original pool. The deepest well of which there is record is the Duncan Bros. - J. Weyen well No. 9 in the SW 1/4 NE 1/4 NE 1/4 sec. 8, which was drilled to 2560 feet and ended in the "Trenton" limestone, which was topped at 2198 feet. Production is from the lower Pennsylvanian sandstones.

Unnamed anticlines, anticlinal noses, and domes

1. Secs. 8, 17, 16, 21, 22, and 15, T. 11 N., R. 7 W. A southeastward-plunging anticlinal nose.

2. Secs. 16, 15, 23, and 24, T. 14 N., R. 7 W., and secs. 19, 20, 25, 26, 27, 28, and 36, T. 14 N., R. 6 W. An east-southeastward-plunging anticline.

3. Secs. 13, 14, 15, and 16, T. 13 N., R. 9 W., and sec. 18, T. 13 N., R. 8 W. An eastward-plunging nose. This was tested by a well (Morgan County No. 21) which had shows of gas from 695-700 feet and at 735 feet in the Lower Mississippian and a slight oil show in Osage siltstone between 885 and 895 feet. It ended in the Devonian-Silurian limestones at 1150 feet.

4. Secs. 5, 6, 7, and 8, T. 14 N., R. 8 W. A broad anticlinal nose plunging southeastward has been tested by one well (Morgan County No. 1), which reported a show of oil from 204-208 feet in the Pennsylvanian. Another well (Morgan County No. 18) in sec. 2, T. 13 N., R. 8 W., had a gas show from 324 to 347 feet in the Pennsylvanian and good oil shows at 800 feet and from 912 to 965 feet, both in the Lower Mississippian.

5. Secs. 33 and 34, T. 14 N., R. 8 W. A small dome with very small closure. This was tested (Morgan County No. 2) to 1680 feet and had a show of gas from 800 to 812 feet in the Lower Mississippian, a show of oil at 945 feet in the Lower Mississippian, and a show of oil between 1590 and 1680 feet in the "Trenton" limestone. A well (Morgan County No. 20) in sec. 5, T. 13 N., R. 8 W., had reported shows of oil at 735 feet and 885 feet in the Burlington-Keokuk limestones. The possibilities of this small dome do not seem very favorable.

6. Secs. 30, 31, and 32, T. 10 N., R. 9 W. This small eastward-plunging nose has been tested by a well (Macoupin County No. 466) which had an oil show from 227 to 242 feet, probably in the Pennsylvanian. It presumably entered the "Trenton" limestone, as it went to a depth of 1540 feet.

The well (Jersey County No. 14) in sec. 32, T. 7 N., R. 11 W., had a reported oil show in the lower Jefferson City dolomite at 1770 feet. The well (Greene County No. 48) in sec. 19, T. 9 N., R. 11 W., had an oil show at 850 feet in the "Trenton" limestone. Neither of these wells is within the area of outcrop of coal No. 6, hence structural data for this map are not available at their localities.

Table 3. - Selected List of Deep Drillings and Wells with Reported Shows of Oil or Gas

Driller, farm, well number, year drilled	¼ Sec.	Location Sec.	T.	R.	County number on map	Located on structure number**	T.D.	Surface elevation	Depth to top Lower Miss.	Depth to top Dev.-Sil.	Depth to top of "Trenton"
Greene County											
Owens - Jacob G. Pope	SE NW	19	9N	11W	48	--	1187				
Owens - Geo. Furruss	NW SW NE	15	10N	11W	45	--	745	630+	210	740	
Owens - F. A. Johnson 1 (1939)	SW SE SE	16	11N	10W	10	--	1586	624.6	242	874	1260
Owens - J. S. Hopkins	SW cor. NE	16	12N	11W	2	--	352	625	120		
Jersey County											
E. C. Kuhse - E. A. Heiderman (1934)	SE NE NW	24	7N	10W	16	--	402	656.4	250?		
Richard Gilham	SE cor. SW	28	7N	11W	11	--	1800	740		600?	
A. R. Gerson - Knight 1 (1939)	SW NW NW	32	7N	11W	14	--	2235	655	62	495	805
*Winter Bros. et al - Mary McDow 1 (1929)	SW NE NW	32	7N	11W	15	--	887	665+	62	500	809
E. M. Gould & Son - Grover Pearce 1 (1939)	SE SW NE	27	8N	10W	5	--	1805	593	180	900	1300
Jerseyville City Well 2	NW cor.	28	8N	11W	8	--	1542	646.2	100	575	975
E. C. Kuhse - Chapman 1 (1938)	SE SW SE	27	9N	10W	1	--	755	551.3	220		
Macoupin County											
Madison Coal Corp. - Mine #5 (1924)	CN NE NW	1	7N	6W	358	--	750	681.7	724		
Duncan Bros. - Woolridge 4 (1931)	SE NW NE	23	7N	7W	293	1	2307	608	675	1485	2113
Dortomedge Oil Co. - Hunsinger 1 (1941)	SW NW NE	25	7N	7W		--	652		635		
Miller Oil Co. - D. Funderburg 1	NE NW NE	36	7N	7W	216	--	671	532.5	610		
Duncan Bros. - J. Weyen 9 (1921)	SW NE NE	8	8N	6W	286	4	2560	665.7	700	1575	2198
Hercules Oil & Gas - Lonzeratti 1 (1931)	SW SE SW	20	8N	6W	289	12	575	649.3			
Coag Oil & Gas Co. - P. Fronzol 1 (1923)	SW NW NE	29	8N	6W	143	12	536	647.0			
Superior Coal Corp. - Fricke 21 (1913)	NW SW NW	34	8N	6W	148	12	360	655.4			
Madison Coal Corp. - Mine #5 (1923)	SE NW NE	35	8N	6W	149	--	2000	678.3	727	1699	
Madison Coal Corp. - Mine #5 (1923)	NE SE SE	36	8N	6W	324	--	1000	673.2	776		
Hercules Oil & Gas Co. - Weyen 1 (1931)	SW SE SE	23	8N	7W	290	12	625	648.0	610		

Table 3. - (Continued)

Driller, farm, well number, year drilled	Location ¼ Sec.	Sec.	T.	R.	County number on map	Located on structure number**	T.D.	Surface elevation	Depth to top Lower Miss.	Depth to top Dev.-Sil.	Depth to top of "Trenton"
Macoupin County (Cont'd.)											
P. L. Miller - Crabtree 1 (1940)	SW SE SE	1	10N	6W	441	--	720	631.5			
Adams & Lagers - J. E. Cole 1 (1940)	SE NE SW	2	10N	6W	443	--	555	618.4			
J. B. Cole A-11	NE cor. NE	9	10N	6W	49	8	695	597.5	653		
Miller & Falder - Wm. Miller 1 (1919)	SW SE NW	12	10N	7W	67	15	580	612.6			
Ohio Oil Co. - A. Broun 2 (1913)	SE SW SW	17	10N	7W	71	3A	482	627.5			
F. Mudgett - Goebelt 7 (1941)	SE NE SW	20	10N	7W	332	3A	485	623.3			
Impromptu Oil & Gas - Barnstable 1	N NE SE	24	10N	7W	72	3	550	575			
Impromptu Oil & Gas - Walker 2 (1909)	NE SW NW	35	10N	7W	78	3	535	561.1	537?		
A. M. Crawford	NW SW SE	14	10N	8W	353	3	496	618.8			
W. G. Diller et al - Keele 1 (1939)	SE SE NE	32	10N	9W	466	--	1540		242?	998?	
A. W. Crawford's Options 8 (1902)	SE SE NW	29	11N	6W	39	8	328	644.2			
Adams & Lagers - J. A. Cole 1 (1940)	SW SW SE	35	11N	6W	442	--	633	629.2			
Adams & Lagers - Bristow 1 (1941)	SE SE NE	7	11N	7W	372	15	1487		565	1425	
Phillips Petroleum Co. - Giller 1 (1938)	NW NE NW	15	11N	8W	342	--	1828		472	1237	
Ohio Consolidated Oil Co. - Arnett Heirs (1911)	NW NW SW	32	11N	8W	21	--	724	588.0	395		
Hettick Oil Development Ass'n. - C. P. Starkweather 1 (1936)	NW SW	36	11N	9W	440	--	1076	535	297	1001?	
A. W. Crawford's Option 2 (1903)	N½ SW NE	31	12N	6W	9	--	505	634.1			
O. G. Hayes - Alderson 1 (1941)	SE SE NE	17	12N	7W	305	7	578	668	540		
Morgan County											
International Oil & Gas Co. - J. W. Tomb 1	SE SW NE	2	13N	8W	18	--	965	689.7	565		
Dr. Hughes - Proctor 1 (1909)	NW NE	5	13N	8W	20	--	1030		500		
Werner Drilling Co. - W. H. Diller 1 (1939)	½ SW NW	18	13N	8W	21	--	1150	666.2	400	1110	
Waverly Oil & Gas Co. - McDivett 2 (1917)	NE SW SE	22	13N	8W	23	--	1202	593.9	500	1010	
Magnolia Petroleum Co. - J. B. Keplinger 1 (1941)	SW SW SE	28	13N	8W	38	--	1754	634	385	1045	1585

Table 3. - (Concluded)

Driller, farm, well number, year drilled	¼ Sec.	Location Sec.	T.	R.	County number on map	Located on structure number**	T.D.	Surface elevation	Depth to top Lower Miss.	Depth to top Dev.-Sil.	Depth to top of "Trenton"
Morgan County (Cont'd.)											
C. T. Hunt - E. F. Cuddy 2 (1940)	NE NW NW	2	13N	10W	11	--	1512	699.0	285	1012	1380
Hills & McConnell - J. W. Sharp 1 (1942)	NE NE SW	25	13N	10W		--	952		195	807	
P. C. Irvin - Clark 1 (1930)	SW SE NE	11	13N	11W	10	--	487	677.9	235		
P. C. Irvin et al - J. Lukeman 1 (1930)	SW SW	7	14N	8W	1	--	443	708.0			
Waverly Oil Syndicate, Ltd. - Dora Hubbs 1 (1938)	SE NE SE	33	14N	8W	2	--	1680	676.3	435	1160	1346
Shippey, Madden & Parish - C. Davis 1 (1929)	SE SE NE	4	14N	9W	3	--	495	666.1	340		
Allan J. Coe - Robinson 1 (1942)	SE SW NW	29	14N	10W		--	1041		250?	937	
Sangamon County											
Waverly Coal Mining & Prosp. Co. (1904)	NE NE SW	7	13N	7W	20	14	500	625.7			
Scott County											
Manchester Mining Co.	21 or 22		13N	11W	1	--	312	690±	212		

* Wells omitted from index map.

** The numbers refer to the list of structures near the beginning of the text on oil and gas possibilities.

Summary of Formations Encountered in Deep Wells

Macoupin County No. 145
Madison Coal Corporation - Diamond Drill Hole No. 15,
SW 1/4 NW 1/4 NE 1/4 sec. 35, T. 8 N., R. 6 W.
Elevation 678 feet.

Formation	Thickness	Depth to bottom	Altitude of top
Pleistocene system	113	113	+678
Pennsylvanian system	589	702	+565
Top coal No. 6 at 408			+270
Mississippian system			
Chester series	25	727	- 24
Iowa series			
Ste. Genevieve formation	58	785	- 49
St. Louis limestone	263	1048	-107
Salem limestone	139	1187	-370
Warsaw formation	125	1312	-509
Burlington-Keokuk limestones	145	1457	-634
Fern Glen formation	105	1562	-779
Chouteau limestone	24	1586	-884
Hannibal shale	76	1662	-908
Louisiana limestone	8	1670	-984
Grassy Creek shale	30	1700	-992
Devonian system			
Cedar Valley, Wapsipinicon, and Bailey (?) limestones	136	1836	-1022
Silurian system			
Niagaran dolomite	164	2000	-1158

Macoupin County No. 440
Hettick Oil Development Association - C. P. Starkweather
No. 1, W 1/2 NW 1/4 SW 1/4 sec. 36, T. 11 N., R. 9 W.
Elevation 535 feet.

(Pleistocene system			
(Pennsylvanian system	297	297	+535
Mississippian system			
Iowa series			
St. Louis limestone	43	340	+238
Salem limestone	90	430	+195
Warsaw shale	109	539	+105
Keokuk limestone	77	616	- 4
Burlington limestone	114	730	- 81
Fern Glen formation	66	796	-195
Hannibal shale	115	911	-261
Louisiana limestone	4	915	-376
Grassy Creek shale	86	1001	-380
Devonian system			
Cedar Valley-Wapsipinicon limestones	75	1076	-466

Macoupin County No. 387
Ohio Oil Co. - G. Groves, NE 1/4 SE 1/4 NW 1/4, sec. 15, T. 7 N., R. 7 W. Elevation 574 feet.

	Thickness	Depth to bottom	Altitude of top
Pleistocene system	15	15	+574
Pennsylvanian system	495	510	+559
Top of coal No. 6 at 242			
Mississippian system			
Chester series	90	600	+ 64
Iowa series			
Ste. Genevieve, St. Louis, and Salem limestones	300	900	- 26
Warsaw formation	115	1015	-326
Burlington and Keokuk limestones	205	1220	-441
Fern Glen formation	88	1308	-646
Chouteau limestone	27	1335	-734
Hannibal shale	65	1400	-761
Grassy Creek shale	25	1425	-826
Devonian - Silurian systems			
"Sand"	25	1450	-851
"Lime"	50	1500	-876

Macoupin County No. 463
O. Z. Smith et al - Klein No. 1, NW 1/4 NW 1/4 SE 1/4 sec. 7, T. 9 N., R. 7 W. Elevation 542 feet.

Pleistocene system	30	30	+542
Pennsylvanian system	463	493	+512
Top of coal No. 6 at 283			+259
Top of lower Pennsylvanian sandstone at 353			+189
Mississippian system			
Iowa series			
Ste. Genevieve, St. Louis, and Salem limestones	282	775	+ 49
Warsaw formation	100	875	-233
Keokuk, Burlington, and Fern Glen limestones	258	1133	-333
Chouteau limestone	21	1154	-591
Kinderhook shales	142	1296	-612
Devonian system			
Cedar Valley and Wapsipinicon limestones	84	1380	-754

Macoupin County No. 372.
Adams and Lagers - A. Bristow No. 1, SE 1/4 SE 1/4 NE 1/4 sec. 7, T. 11 N., R. 7 W. Elevation unknown.

	Thickness	Depth to bottom	Altitude of top
Pleistocene system)	565	565	
Pennsylvanian system)			
Mississippian system			
Iowa series			
Ste. Genevieve limestone	10	575	
St. Louis and Salem limestones	285	680	
Warsaw shale	135	995	
Burlington and Keokuk limestones	230	1225	
Hannibal shale	100	1325	
Grassy Creek shale	100	1425	
Devonian system			
Cedar Valley and Wapsipinicon limestones	62	1487	

Morgan County No. 21.
Werner Drilling Company - W. H. Diller No. 1, W 1/2 SW 1/4 NW 1/4 sec. 18, T. 13 N., R. 8 W. Elevation 666 feet.

Pleistocene system	60	60	+666
Pennsylvanian system	340	400	+606
Mississippian system			
Iowa series			
St. Louis limestone	30	430	+266
Salem limestone	160	590	+236
Warsaw formation	110	700	+ 76
Burlington and Keokuk limestones	185	885	- 34
Osage siltstone	13	898	-219
Hannibal shale	117	1015	-232
Grassy Creek shale	98	1113	-349
Devonian and Silurian systems			
Limestone and dolomite	40	1150	-447

Greene County No. 45
Geo. Burruss well in NW corner, SW 1/4 NE 1/4 sec. 15, T. 10 N., R. 11 W. Elevation 630 feet.

	Thickness	Depth to bottom	Altitude of top
Pleistocene system	40	40	+630
Pennsylvanian system	170	210	+590
Top coal No. 2 at 155 feet			+475
Mississippian system			
Iowa series			
St. Louis limestone	10	220	+420
Salem limestone	80	300	+410
Warsaw formation	68	368	+330
Keokuk and Burlington limestones	232	600	+262
Kinderhook shales	140	740	+ 30
Devonian system			
"Sandstone"	5	745	-110

Jersey County No. 14
A. W. Gerson - Knight No. 1, SW 1/4 NW 1/4 NW 1/4 sec. 32, T. 7 N., R. 11 W. Elevation 655 feet.

Correlations to base of St. Peter sandstone by Illinois Geological Survey and below St. Peter sandstone by Missouri Geological Survey.

Pleistocene system	62	62	+655
Mississippian system			
Iowa series			
Salem limestone	10	72	+593
Warsaw formation	78	150	+583
Keokuk and Burlington limestones	200	350	+505
Fern Glen formation	55	405	+305
Chouteau limestone	35	440	+250
Hannibal shale	50	490	+215
Louisiana limestone	5	495	+165
Grassy Creek shale	5	500	+160
Devonian system			
Wapsipinicon formation	25	525	+155
Silurian system			
Dolomite	120	645	+130
Ordovician system			
Maquoketa formation	160	805	+ 10
Kimmswick limestone	100	905	-150
Decorah limestone	40	945	-250
Plattin limestone	160	1105	-290
Joachim dolomite	95	1200	-450
Glenwood-St. Peter sandstones	175	1375	-545
Powell dolomite	25	1400	-720
Cotter dolomite	150	1550	-745
Upper Jefferson City dolomite	70	1620	-895

(Continued on page 44)

Jersey County No. 14
A. W. Gerson - Knight No. 1, SW 1/4 NW 1/4 NW 1/4 sec. 32, T. 7 N., R. 11 W. Elevation 655 feet.

	Thickness	Depth to bottom	Altitude of top
Continued)			
Lower Jefferson City dolomite	165	1785	-965
Roubidoux formation	165	1950	-1130
Upper Gasconade dolomite	30	1980	-1295
Lower Gasconade - Van Buren dolomites	210	2190	-1325
Gunter formation	40	2230	-1535
ambrian system			
Eminence dolomite (?)	5	2235	-1575

Jersey County No. 5
E. N. Gould & Son - G. Pearce No. 1, SE 1/4 SW 1/4 NE 1/4 sec. 27, T. 8 N., R. 10 W. Elevation 593 feet.

	Thickness	Depth to bottom	Altitude of top
his well reported a show of gas in the Silurian and oil shows in he Devonian, Kimmswick, either Plattin or Joachim, and Glenwood.			
leistocene system	60	60	+593
ennsylvanian system	20	80	+533
ississippian system			
Iowa series			
St. Louis limestone	235	315	+513
Salem limestone	90	405	+278
Warsaw formation	95	500	+188
Keokuk and Burlington limestones	220	720	+ 93
Fern Glen limestone	35	755	-127
Chouteau limestone	32	787	-162
Hannibal formation	83	870	-194
Louisiana limestone	13	883	-277
Grassy Creek shale	22	905	-290
evonian system			
Cedar Valley limestone	20	925	-312
Wapsipinicon limestone and dolomite	25	950	-332
ilurian system			
Niagaran dolomite	188	1138	-357
rdovician system			
Cincinnatian series			
Maquoketa shale	162	1300	-545

(Continued on page 45)

Jersey County No. 5
E. M. Gould & Son - G. Pearce No. 1, SE 1/4 SW 1/4 NE 1/4 sec. 27, T. 8 N., R. 10 W.
Elevation 593 feet.

	Thickness	Depth to bottom	Altitude of top
(Continued)			
Mohawkian series			
Kimmswick limestone	100	1400	-707
Decorah limestone	20	1420	-807
Plattin limestone	185	1605	-827
Joachim limestone	65	1670	-1012
Glenwood formation	35	1705	-1077
Chazyan series			
St. Peter sandstone	100	1805	-1112

ILLINOIS STATE GEOLOGICAL SURVEY
URBANA, ILLINOIS

TABULATED COAL DATA

FOR

MACOUPIN COUNTY, EASTERN GREENE AND JERSEY, SOUTHEASTERN SCOTT, AND SOUTHERN MORGAN AND SANGAMON COUNTIES

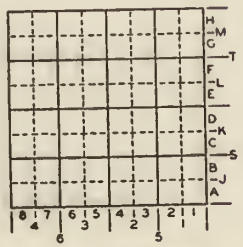
TO ACCOMPANY CIRCULAR NO. 88

MAY, 1942

ILLINOIS STATE GEOLOGICAL SURVEY

URBANA, ILLINOIS

EXPLANATION OF ABBREVIATIONS USED IN TABULATED DRILL RECORD DATA



Section Plat

Type of Hole:

CH —Churn drill
PT —Oil test by churn drill
DD —Diamond drill
RD —Rod drill
TD —Rotary drill
GW —Gas well
WW—Water well

} Logs available for examination at the offices of the Survey.

Combination symbols, replacing the second letter of the abbreviations above, have the following meanings:

-S —Skeleton log
-C—Thickness of coal confidential
-K—Entire log confidential
-N—No log in Survey files

SH—Shaft mine
SL —Slope mine
SD—Drift mine
ST—Strip mine
SA —Abandoned mine
OA—Abandoned strip mine
OU—Outcrop information

Location: Location in section by numbers and letters; see plat—above, left.

Surface Altitude is given in feet and tenths of feet: as "4326" means "top of hole is 432.6 feet above sea level." The *Level Method* for determining altitude of top of hole, shaft, etc., is as follows:

B —Barometer
C —Company information
F —Field estimate using topographic map
H —Hand level
P —Plane table
T —Topographic map estimate not in field
Y —Wye level or transit

Total Depth of hole is given to nearest foot.

Quad. Number: Refers to number of quadrangle as given on Index Map (p. 40) in "Publications on the Geology, Mineral Resources and Mineral Industries of Illinois, Sept. 1, 1941." An asterisk (*) after number indicates the datum point is not shown on the structural contour map drawn on the Herrin (No. 6) coal.

Year Drilled: Last two figures only; as "26" means "1926."

Doubtful Information: A notation here indicates that, although information is available, the accuracy of some part of the data is in doubt. The nature of the doubt is shown by number, as follows:

2. Correlation of coal bed
3. Exact location
4. Surface altitude
5. Both correlation and location
6. Both correlation and altitude
7. Both location and altitude
8. Depth to coal bed
9. Correlation, location, and altitude

Coal No. 6 and No. 5: *Depth* to coal is given to the top of bed, to the nearest foot. *Altitude* is given of the top of the coal bed in feet above sea level. A symbol "CR" following this figure indicates distance *below* sea level. *Thickness* is given in feet and inches. *O indicates coal bed is eroded or is absent at its usual horizon. Where no coal data are given, the information is unreliable or hole did not reach the coal bed. Where *altitude* is shown but not *depth*, the former is estimated from other data.

Coal No. 5*: Refers to coal No. 5 unless otherwise specified in the company name column.

Operators: CC signifies Coal Company; MC, Mining Company, etc. Names are slightly abbreviated when necessary.

CONTENTS

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. / In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. / In.
					GREENE JAN 1 1942												
9 N	11 W	6 K 2	47	C S	E G PROCTOR			1180	193 *								
9 N	11 W	19 E 5	48	C S	J G POPE		4930 H	1187	198								
9 N	11 W	30 A 4	56	C N	E G PROCTOR		5830 H	250	198								
9 N	11 W	31	50	C S	J E PROCTOR			1300	198 *								
9 N	11 W	32 H 8	51	W W	KANE SCHL		5530 T	138	198								
10 N	10 W	3 A 6	28	W W	KUHSE E		5331 C	40	192 *	35							
10 N	10 W	3 A 7	26	W W	KUHSE E		5326 C	40	192 *	35							
10 N	10 W	3 A 7	27	W W	KUHSE E		5350 T	55	192 *	35							
10 N	10 W	3 A 7	25	W W	THORPE CWC		5340 T	84	192 *	35							
10 N	10 W	3 A 8	29	W W	KUHSE E		5312 C	50	192 *	35							
10 N	10 W	3 E 8	30	W W	KUHSE E		5300 T	30	192 *	35							
10 N	10 W	4 D 1	33	W W	KUHSE E		5350 T	35	192 *	35							
10 N	10 W	4 D 1	34	W W	KUHSE E		5500 T	34	192 *	35							
10 N	10 W	4 E 1	31	W W	KUHSE E		5500 T	38	192 *	35							
10 N	10 W	4 E 1	32	W W	KUHSE E		5500 T	35	192 *	35							
10 N	10 W	5 G 1	37	W W	KUHSE E		5850 T	70	192	35							
10 N	10 W	5 G 2	35	W W	KUHSE E		5780 T	90	192	35							
10 N	10 W	5 G 4	36	W W	KUHSE E		5920 T	92	192	35							
10 N	10 W	7 B 7	67	S L	WALKER OS		5800 T		193								
10 N	10 W	15 A 6	39	W W	KUHSE E		5000 T	68	192	35							
10 N	10 W	15 A 7	38	W W	KUHSE E		5100 T	93	192	35							
10 N	10 W	20 C 3	40	W W	C WAGONER		5300 T	96	192								
10 N	10 W	30 G 2	41	W W	ERIE DRILL		5420 T	280	192	40							
10 N	10 W	33 H 1	42	W W	ASCHENBACH		5349 P	122	192								
10 N	10 W	33 H 1	42	W W	NO 2 COAL										80	455	2 00
10 N	10 W	34 D 4	43	C H	W FILLAGER		5300 T	122	192								
10 N	11 W	4 F 4	86	P T	SCROGGIN		5850 T	570	193	41							
10 N	11 W	15 A 3	46	W S	HAVERSTICK		6050 T	300	193	39							
10 N	11 W	15 G 3	45	C H	G BURRUS		6300 T	745	193								
11 N	10 W	16 A 2	10	P T	OWENS		6246 P	1586	192	39							
11 N	10 W	16 A 2	10	P T	NO 2 COAL										193	432	4 00
11 N	10 W	27 A 6	11	S A	COLLINS		5720 T	65	192			57	515	6 00			
11 N	10 W	27 B 4	66	S A	GOBEL CCM		5926 P		192			100	493	3 06			
11 N	10 W	27 B 4	13	S A	GRNFLD MC		6090 B	102	192			95	514	7 02			
11 N	10 W	27 B 6	88	S A	KINCD ARED		5723 P		192			52	520	5 06			
11 N	10 W	27 C 4	113	S A	POLI CC		5613 P		192								

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6				Coal No. 5 *			
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft.	Thickness In.	Depth (Feet)	Altitude (Feet)	Thickness Ft.	Thickness In.
11N	10W	27 C6	12	SA	CMMUNITYCC		5960 P	75	192										
11N	10W	27 E3	87	SA	GRNFLD MC		5730 B		192			55	518						
11N	10W	28 C2	76	SA	POLI CC		6000 T	115	192 *			60	540						
11N	10W	28 C2	76	SA	NO 4 COAL											100	500	9	00
11N	10W	31 C1	14	WW	KUHSE E		5950 T	52	192	35									
11N	10W	31 D1	15	WW	KUHSE E		6000 T	67	192	35		64	536	3	00				
11N	10W	31 E2	16	WW	KUHSE E		6000 T	68	192	35		65	535	3	00				
11N	10W	31 E3	17	WW	KUHSE E		6000 T	54	192	35									
11N	10W	32 C4	21	WW	KUHSE E		5950 T	42	192	35									
11N	10W	32 C5	20	WW	KUHSE E		5950 T	65	192	35									
11N	10W	32 E3	19	WW	KUHSE E		5930 T	81	192	35		78	515	3	00				
11N	10W	32 G5	18	WW	KUHSE E		6030 T	36	192	35									
11N	10W	34 D8	22	WW	THORPE CWC		5500 T	50	192	35									
11N	10W	35 D4	23	CS	T T FORD		6100 B	150	192										
11N	10W	36 A3	24	CS	T T FORD		5800 T	125	192										
11N	11W	29 B7	7	WW	KUHSE E		5400 T	105	193										
11N	11W	32 C2	9	WW	PATTERSON		5650 T	65	193										
11N	11W	32 C2	8	RD	SK ALXNDER		5650 T	21	193										
11N	11W	32 C2	8	RD	NO 2 COAL											18	547	2	06
12N	10W	15 D8	94	SA	J HOPPER		5069 P		192										
12N	10W	15 D8	95	SA	LOCAL MINE		4999 P		192										
12N	10W	18 D7	90	SA	FRD STCKLS		5484 P		193										
12N	10W	18 D7	90	SA	NO 2 COAL											21	527		
12N	10W	18 D7	91	SD	FRD STCKLS		5388 P		193										
12N	10W	18 D7	91	SD	NO 2 COAL											10	529		
12N	10W	18 E8	92	SD	FRD STCKLS		5692 P		193										
12N	10W	18 E8	92	SD	NO 2 COAL											30	539		
12N	10W	19 F7	89	SA	L FERGUSON		5150 H		193										
12N	10W	19 F7	89	SA	NO 2 COAL												115		
12N	10W	19 G6	52	SA	L FERGUSON		5180 P		193										
12N	10W	19 G6	52	SA	NO 2 COAL												518	2	04
12N	10W	22 F1	93	WW			5330 F		192										
12N	10W	22 H4	75	SA	RUSS RMBRG		5120 H		192										
12N	10W	23 F8	1	WW	A L BRYANT		5290 H	46	192										
12N	10W	23 F8	1	WW	NO 2 COAL											43	486	2	06
12N	11W	1	53	SA	E H WALTZ		5500 T		170 *										
12N	11W	1	53	SA	NO 2 COAL											30	520	2	06
12N	11W	12 F4	54	SL	J HOPPER		5500 T		170										
12N	11W	12 F4	54	SL	NO 2 COAL											8	542	2	06
12N	11W	16 E4	2	CH	J S HOPKNS		6250 T	352	193										
12N	11W	16 E4	2	CH	NO 2 COAL											103	522		
12N	11W	19 B5	98	SA	LOCAL MINE		6134 P		193										
12N	11W	19 B5	98	SA	NO 4 COAL											35	578		

(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
12N	11W	19 F3	97	SA	LOCAL MINE		6302 P		193								
12N	11W	19 F3	97	SA	NO 4 COAL										50	580	
12N	11W	20 F8	81	SH	D W TATE PERS		6216 P		193								
12N	11W	20 G1	99	SA	LOCAL MINE		6168 P		193								
12N	11W	21 F7	96	SA	LOCAL MINE		5820 P		193*								
12N	11W	21 F7	100	OU	NO 4 COAL		5746 P		193							575	
12N	11W	21 F8	70	OU	HANOVER LS		5880 P		193								
12N	11W	21 G8	3	RD	ILL GEOL S		6000 T	41	193*	28							
12N	11W	21 G8	3	RD	NO 4 COAL										9	591	9 06
12N	11W	21 G8	3	RD	NO 2 COAL										38	562	2 05
12N	11W	21 G8	101	SA	LOCAL MINE		6152 P		193								
12N	11W	21 H5	69	WN			6146 P		193								
12N	11W	22 G1	57	SL	O CUMMINGS		5340 H		193								
12N	11W	22 G1	57	SL	NO 2 COAL										10	524	
12N	11W	22 G1	120	OU	NO 2 COAL		5240 H		193							524	
12N	11W	23 A2	105	OU	NO 2 COAL		5140 H		193*							514	
12N	11W	23 B2	106	SA	LOCAL MINE		5140 H		193*								
12N	11W	23 B2	68	OU	NO 2 COAL		5150 H		193							515	
12N	11W	23 B3	111	OU	NO 2 COAL		5190 H		193*							519	
12N	11W	23 B4	110	OU	NO 2 COAL		5170 H		193*							517	
12N	11W	23 C3	112	OU	NO 2 COAL		5150 H		193*							515	
12N	11W	23 C4	107	OU	NO 2 COAL		5180 H		193*							518	
12N	11W	23 C4	108	OU	NO 2 COAL		5180 H		193*							518	
12N	11W	23 C4	109	OU	NO 2 COAL		5140 H		193*							514	
12N	11W	23 C4	61	SD	W H ALLEN		5180 H		193*								
12N	11W	23 C4	61	SD	NO 2 COAL											518	
12N	11W	23 D1	83	SA	E GOACHER		5800 T		193*								
12N	11W	23 E4	59	SL	T HOPPER		5800 T		193*								
12N	11W	23 F6	82	SA	L ELLIOT		5240 H		193								
12N	11W	23 F6	82	SA	NO 2 COAL										20	504	2 06
12N	11W	23 G8	119	SD	OVERBY M		5330 H		193								
12N	11W	23 G8	119	SD	NO 2 COAL										8	525	
12N	11W	23 H7	118	OU	NO 2 COAL		5220 H		193							522	
12N	11W	23 H8	60	SD	F SIMMONS		5270 H		193								
12N	11W	23 H8	58	SL	GEO WARREL		5300 T		193*								
12N	11W	23 H8	58	SL	NO 2 COAL										25	505	2 06
12N	11W	24 A7	62	SD	SCHOFIELD		5250 T		193								
12N	11W	24 A7	62	SD	NO 2 COAL										5	520	2 08
12N	11W	25 G7	63	SA	H HARBAUGH		5400 T		193								
12N	11W	28 G7	104	SA	LOCAL MINE		5365 P		193								
12N	11W	28 G8	102	SA	LOCAL MINE		5511 P		193								
12N	11W	28 H8	103	SA	LOCAL MINE		5437 P		193								
12N	11W	28 H8	116	SD	B F ISRAEL		5367 P		193								
12N	11W	28 H8	116	SD	NO 2 COAL											537	

(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 ✲		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
12N	11W	29 A2	85	SA	T K CONLEE		5600 T		193								
12N	11W	29 A2	85	SA	NO 2 COAL										38	522	2 06
12N	11W	29 A2	65	SA	BURL WYATT		5200 T		193								
12N	11W	29 A2	65	SA	NO 2 COAL										4	516	2 06
12N	11W	29 E7	64	SA	R WHTEHEAD		5618 P		193								
12N	11W	29 E7	64	SA	NO 2 COAL										30	532	
12N	11W	29 C4	55	SA	J H LITTLE		5524 P		193								
12N	11W	29 E8	4	RD	WR GRFFTHS		5800 T	36	193								
12N	11W	29 E8	4	RD	NO 2 COAL										30	550	2 06
12N	11W	30 D4	117	OU	NO 2 COAL		5490 P		193							549	
12N	11W	30 E5	5	RD	J GRFFTHS		5710 T	40	193								
12N	11W	30 E5	5	RD	NO 2 COAL										23	548	2 08
12N	11W	30 F5	115	SA	LOCAL MINE		5675 P		193								
12N	11W	30 F5	115	SA	NO 2 COAL										19	549	
12N	11W	30 H5	114	SA	LOCAL MINE		5857 P		193								
12N	11W	31 H5	6	RD	G GRFFTHS		5850 T	23	193	33							
12N	11W	31 H5	6	RD	NO 2 COAL										20	565	2 06
12N	11W	33 H3	84	SA	MARSH WYAT		5500 T		193								
12N	11W	33 H3	84	SA	NO 2 COAL											550	2 06

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(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
					JERSEY JAN 1 1942												
7 N	10 W	7 D1	17	PS	EAGLETN TW		6150 P	810	198	40							
7 N	10 W	7 D1	17	PS	NO 2 COAL										141	474	4 00
7 N	10 W	9 A1	26	SA	LOCAL MINE		5693 P		199								
7 N	10 W	10 C6	24	SA	LOCAL MINE		5428 P		199				543	5 00			
7 N	10 W	10 G2	18	SA	WAGENBLAST	1	5750 T		199 *								
7 N	10 W	10 G2	23	OU	NO 6 COAL		5600 T		199				560	2 00			
7 N	10 W	14 C1	19	SA	YOST BAKER	1	5945 P		199			40	556	3 08			
7 N	10 W	14 C2	25	SA	LOCAL MINE		5924 P		199			45	547	4 00			
7 N	10 W	15 F5	27	OU	NO 6 COAL		5659 P		199				566	2 00			
7 N	10 W	15 G7	21	SA	PHILLIPS M		5442 P		199			4	540	3 06			
7 N	10 W	16 H2	20	SA	GEISLER H		6000 T		199			34	566	3 08			
7 N	10 W	15 H6	28	OU	NO4 BLK SH		5139 P		199								
7 N	10 W	23 F5	36	OU	NO 7 COAL		5739 P		199 *								
7 N	10 W	23 F5	35	OU	NO 6 COAL		5560 P		199				556				
7 N	10 W	23 F5	34	OU	BRERETN LS		5615 P		199 *								
7 N	10 W	23 G4	29	OA	CRNS BOTT		5551 P		199				555	3 00			
7 N	10 W	23 H3	31	SA	LOCAL MINE		5685 P		199								
7 N	10 W	23 H3	32	SA	LOCAL MINE		5740 P		199 *								
7 N	10 W	23 H3	33	OU	NO 7 COAL		5786 P		199								
7 N	10 W	23 H4	30	SA	LOCAL MINE		5671 P		199								
7 N	10 W	24 G5	16	WW	KUHSE E		6564 P	402	199	34		119	537	5 00			
7 N	11 W	21 G4	10	WW	KUHSE E		6380 T	328	198	38							
7 N	11 W	28 A5	11	PT	R GILHAM		7400 T	1800	198								
7 N	11 W	32 C1	12	DD	LNGYR EXPL	2	6400 T	47	198	26							
7 N	11 W	32 C1	13	DD	LNGYR EXPL	1	6400 T	52	198	26							
7 N	11 W	32 C6	15	PT	WNTERS BRO		6650 T	887	198	29							
7 N	11 W	32 C8	14	PT	GERSON A W		6550 T	2235	198	39							
8 N	10 W	27 E3	5	PT	GOULD EM		5923 P	1805	199	39							
8 N	10 W	27 E3	5	PT	NO 2 COAL										158	444	3 00
8 N	11 W	19 H5	6	WW	KUHSE E		5800 T	184	198	38							
8 N	11 W	21 D8	7	WW	ICE PLANT		6400 T	630	198								
8 N	11 W	28 H8	8	WW	JRSEYVILLE	2	6462 P	1542	198	95							
8 N	11 W	36 B6	9	WW	KUHSE		6100 T	235	198	33							
9 N	10 W	27 A3	1	WW	KUHSE E		5513 P	755	199	38							
9 N	10 W	28 A2	2	PT	ERIE DRILL		5430 T	616	199	39							
9 N	10 W	28 A2	2	PT	NO 2 COAL										170	381	
9 N	10 W	35 D5	3	WS	J T RYAN		5960 T	36	199								
9 N	10 W	36 B5	4	WS	RYAN J T		5936 P	136	199								
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(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6				Coal No. 5 *			
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft.	Thickness In.	Depth (Feet)	Altitude (Feet)	Thickness Ft.	Thickness In.
					MACOUPIN JAN 1 1942														
7 N	6 W		229	DD	D SIMPSON	2		152		* 5	7	144		6	11				
7 N	6 W		230	DD	D SIMPSON	3		171		* 5	7	165		7	03				
7 N	6 W		231	DD	D SIMPSON	1		179		* 5		172		6	04				
7 N	6 W		232	DD	D SIMPSON	4		182		* 5	7	176		5	02				
7 N	6 W		228	PT	HFSTETTER	2		447		*		193		7	00				
7 N	6 W	1 E7	316	SA	CONSOL STL	10	6881 P		201			420	268	8	00				
7 N	6 W	1 H5	358	DD	MADISON CC	18	6817 P	750	201	24		404	278	8	00				
7 N	6 W	1 H6	255	SH	MT OLV CC	5	6818 P	426	201	87		410	272	8	06				
7 N	6 W	2 A2	317	SA	CONSOL STL	9	6832 P		201			416	267	8	00				
7 N	6 W	2 H6	359	WW	MT OLV TST	3	6598 P	199	201	31									
7 N	6 W	3 G4	360	WW	MT OLV TST	2	6599 P	266	201	31									
7 N	6 W	3 H6	361	WW	MT OLV TST	1	6500 T	259	201	31	7								
7 N	6 W	5 H7	234	DD	SUPERIORCC	2	6343 C	342	200	2		332	302	7	06				
7 N	6 W	6 E5	256	SH	SUPERIORCC	2HS	6256 P	321	200	4		314	312	7	06				
7 N	6 W	6 E5	411	SH	SUPERIORCC	2AS	6350 T	332	200			325	310	7	06				
7 N	6 W	7 A7	235	DD	SUPERIORCC	6	6174 C	298	200	3		289	328	7	06				
7 N	6 W	9 G4	257	SH	CONSOL STL	15	6544 P		200			375	279	7	08				
7 N	6 W	11 D5	258	SA	CONSOL STL	8	6749 P	418	201	87		401	274	7	09				
7 N	6 W	14 D5	362	DD	MADISON CC	4	6556 C	615	201	21		388	268	4	11				
7 N	6 W	14 D5	362	DD	NO 2 COAL											479	177	2	05
7 N	6 W	15 D2	318	SA	CONSOL STLANCH		6684 P		201										
7 N	6 W	17 D6	236	PT	MILLER OC	1	6282 P	639	200			315	313	5	00				
7 N	6 W	17 D6	236	PT	NO 2 COAL											408	220	2	00
7 N	6 W	18 F2	428	PN	MILLER OC		6050 T		200	18									
7 N	6 W	19 F4	406	PS			5400 T	601	200										
7 N	6 W	19 G4	363	PN			5450 T		200										
7 N	6 W	19 G5	407	PS			5530 P		200										
7 N	6 W	19 G6	364	PN			5530 P		200										
7 N	6 W	21 A3	259	SH	CONSOL STL	7	6514 C	375	200			357	294	6	06				
7 N	6 W	25 E7	377	PN			6294 P		201										
7 N	6 W	26 C6	239	DD	WILLIAMSON		6344 P	369	201			362	272	7	00				
7 N	6 W	26 F6	378	PN			6366 P		201										
7 N	6 W	29 A3	319	SA	CONSOL STL		6280 P		200	5		325	303	7	00				
7 N	6 W	30 C8	365	PS	MILLER		6040 P		200										
7 N	6 W	30 G5	272	SA	CONSOL STL	14	6250 H		200			280	345	7	00				

(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
7 N	6 W	32 D 6	320	S A	CONSOL STL	6	6247 P		200			309	316	7 00			
7 N	6 W	35 D 5	240	D D	WILLIAMSON	3	6190 T	347	201			330	289	4 00			
7 N	7 W	3 D 7	426	P N	MILLER OC		6000 T		200	16							
7 N	7 W	4 G 8	188	D D	SUPERIORCC	34	6563 P	319	200	17		312	344	7 01			
7 N	7 W	8 A 8	189	D D	HUNT R W	C1	6471 P	288	200	17		280	367	5 10			
7 N	7 W	9 E 4	190	D D	SUPERIORCC	18	6504 P	317	200	13		309	341	7 00			
7 N	7 W	9 E 8	191	P T	OHIO OIL		6457 P	592	200								
7 N	7 W	9 G 8	192	D D	SUPERIORCC	33	6504 P	309	200	17		301	349	6 11			
7 N	7 W	10 A 8	425	P N	OHIO OIL		6350 T		200	16							
7 N	7 W	10 D 3	195	D D	SUPERIORCC	22	6330 P	405	200*	13		306	327	6 11			
7 N	7 W	10 D 3	195	D D	NO 2 COAL										400	233	2 06
7 N	7 W	10 D 4	199	D D	SUPERIORCC	24	6403 C	400	200*	13		296	344	7 06			
7 N	7 W	10 D 4	199	D D	NO 2 COAL										382	258	2 00
7 N	7 W	10 E 2	197	D D	SUPERIORCC	31	6305 P	310	200*	17		301	330	7 07			
7 N	7 W	10 E 3	194	D D	SUPERIORCC	17	6357 P	305	200*	13		297	339	7 02			
7 N	7 W	10 E 3	196	D D	SUPERIORCC	30	6336 P	310	200*	17		302	332	7 02			
7 N	7 W	10 E 3	198	D D	SUPERIORCC	29	6334 C	314	200*	17		307	326	5 08			
7 N	7 W	10 E 3	254	S H	SUPERIORCC	4	6381 P	314	200*	17		307	331	7 00			
7 N	7 W	10 E 4	200	D D	SUPERIORCC		6333 P	315	200*	17		306	327	7 09			
7 N	7 W	10 H 2	193	D D	SUPERIORCC	7	6390 C	319	200	3		310	329	7 06			
7 N	7 W	12 E 7	202	P T	OHIO OIL		6340 H	511	200	15		289	345	8 00			
7 N	7 W	13 B 1	203	P T	SNOWDN BRO		5511 H	660	200	14		230	321	7 00			
7 N	7 W	13 B 3	204	P S	MILLER OC		5350 T	549	200		7	226	309	7 00			
7 N	7 W	13 B 6	427	P N	LANGRWISCH		6000 T		200	17							
7 N	7 W	14 A 2	379	P S	MILLER OC		6090 P		200*	16		257	352				
7 N	7 W	14 A 3	415	P N	FLEEG LAMB		6100 T		200*	16							
7 N	7 W	14 A 4	413	P N	DUNCANBROS	5	6100 T		200*	31							
7 N	7 W	14 A 4	339	P S	FLEEG LAMB	2	6120 P	525	200*	15		257	355	7 00			
7 N	7 W	14 A 5	265	P N	DUNCANBROS		6142 P	540	200*	31							
7 N	7 W	14 A 5	412	P N	DUNCANBROS		6080 T		200*	30							
7 N	7 W	14 A 5	208	P S	MILLER OC		6113 Y	500	200*	15		248	363	7 00			
7 N	7 W	14 A 6	292	P T	DUNCANBROS	3	6131 P	558	200*	31		243	370	7 00			
7 N	7 W	14 A 7	205	P S	MILLER OC		6117 Y	465	200*	15		245	367	7 00			
7 N	7 W	14 B 2	206	P S	MILLER BRO		6095 P	515	200*	17							
7 N	7 W	14 C 3	414	P N	FLEEG LAMB		6100 T		200*	16							
7 N	7 W	14 C 5	382	P S	FLEEGOR D		6130 P		200*	16							
7 N	7 W	14 C 7	338	P S	FLEEG LAMB	1	6110 P	467	200*	15		247	364	7 00			
7 N	7 W	14 D 2	381	P S	SCHOOL HSC		6120 P		200	16		252	360				
7 N	7 W	14 E 1	383	P S	OHIO OIL		6130 P		200	17							
7 N	7 W	14 F 8	384	P S	MILLRT OV		5779 P		200	19		222	356				
7 N	7 W	14 G 2	385	P S	WALL		6210 P		200								

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude		Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section											Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
7 N	7 W	15 D 2	422	P N	TURNER W L		6000	T		200	* 19							
7 N	7 W	15 E 1	386	P S	HUCKLEBRY		5960	P		200	* 16		240	356				
7 N	7 W	15 E 5	417	P N	OHIO OIL		5700	T		200	* 15							
7 N	7 W	15 F 1	421	P N	HUCKLEBRY		6000	T		200	* 16							
7 N	7 W	15 F 5	387	P T	OHIO OIL		5740	P	1500	200	* 15		242	331	6 00			
7 N	7 W	15 F 6	418	P N	OHIO OIL		5700	T		200	* 15							
7 N	7 W	15 F 7	388	P S	MILLER OC		6210	P		200	* 16		285	336				
7 N	7 W	15 G 1	389	P S	HOOD H		6130	P		200	* 16		260	353				
7 N	7 W	15 G 4	390	P S	OHIO OIL		6120	P		200	* 16		268	344				
7 N	7 W	15 G 6	419	P N	OHIO OIL		6100	T		200	* 16							
7 N	7 W	15 H 4	420	P N	OHIO OIL		6100	T		200	* 16							
7 N	7 W	18 E 7	209	D D	HUNT R W	C 2	6239	P	281	200	17		270	354	6 07			
7 N	7 W	21 G 4	391	P S	BAUER A		5880	P		200			248	340				
7 N	7 W	22 F 5	210	D D	SUPERIORCC	8	6088	C	283	200	3		276	333	6 08			
7 N	7 W	22 H 1	392	P S	OHIO OIL		5950	P		200	16		243	352				
7 N	7 W	23 D 1	212	P S	MILLER GAS		5995	Y	610	200	*		270	330	7 00			
7 N	7 W	23 D 5	393	P S	WILDER E G		6010	P		200	*		273	328				
7 N	7 W	23 D 7	394	P S	MILLER OC		6000	T		200	* 16							
7 N	7 W	23 F 3	395	P S	MILLER OC		6050	P		200	* 16		260	345				
7 N	7 W	23 G 2	396	P S	MILLER OC		6080	P		200	* 16		246	362				
7 N	7 W	23 G 4	263	P S	MILLER GAS		6094	Y	506	200	*		256	353	7 00			
7 N	7 W	23 H 2	262	P S	MILLER GAS		5847	P	470	200	* 16		224	361				
7 N	7 W	23 H 3	293	P T	DUNCANBROS	4	6080	T	2371	200	* 31		260	348	5 00			
7 N	7 W	23 H 3	260	P S	LANGERWSCH		6091	P	500	200	* 17		249	360	6 00			
7 N	7 W	23 H 3	211	D D	SUPERIORCC	11	6089	Y	258	200	* 3		250	359	6 11			
7 N	7 W	23 H 4	416	P N	LANGERWSCH		6100	T		200	* 17							
7 N	7 W	23 H 4	261	P S	MILLER OC	1	6100	P	500	200	* 16		247	363	6 00			
7 N	7 W	23 H 7	207	P S	MILLER OC		6132	Y	500	200	* 15		247	366	7 00			
7 N	7 W	23 H 8	213	P S	MILLER OC	1	6075	Y	495	200	* 16		260	348	7 00			
7 N	7 W	24 B 5	397	P S	IBBETSON E		5300	P		200	15		202	328				
7 N	7 W	24 C 4	215	P T	MILLER GAS		5265	Y	450	200	15		185	342	6 00			
7 N	7 W	24 C 5	424	P N	MILLER OC		5900	T		200	16							
7 N	7 W	24 D 5	398	P S	MILLER OC		5320	P		200	15		200	332				
7 N	7 W	24 D 7	399	P S	MILLER OC		5900	T		200	16							
7 N	7 W	24 E 4	264	P S	MILLER GAS	1	5310	Y	451	200	16							
7 N	7 W	24 E 5	401	P S	OHIO OIL		5340	P		200	16		205	329				
7 N	7 W	24 E 5	400	D S	SUPERIORCC		5310	P		200			200	331				
7 N	7 W	24 G 5	402	P S	ADLER H		5810	P		200			251	330				
7 N	7 W	24 G 7	403	P S	ADLER H		5710	P		200			240	331				
7 N	7 W	25 A 3	201	P S	MILLER OC		5987	Y	538	200	15		260	339				

MCPN.

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
7 N	7 W	25 B 2	268	S A			5530 P		200			210	343				
7 N	7 W	25 C 7	217	P T	MILLER OC		5319 H	474	200	15		197	335	7 00			
7 N	7 W	25 F 8	423	P N	WOOD O C	1	5900 T		200	30							
7 N	7 W	25 G 4	503	P T	DRTMDGE OC		5650 T		200								
7 N	7 W	26 C 8	218	D D	SUPERIORCC	10	5885 H	249	200	3		242	347	7 00			
7 N	7 W	26 D 8	219	D D	SUPERIORCC	36	5930 P	271	200	18		263	330	7 08			
7 N	7 W	27 E 2	221	D D	SUPERIORCC	38	5948 P	266	200	18		258	337	7 05			
7 N	7 W	27 E 2	222	D D	SUPERIORCC	39	5961 P	270	200	18		263	333	6 10			
7 N	7 W	27 G 2	271	D D	SUPERIORCC	41	5958 P	180	200	18							
7 N	7 W	27 G 5	224	D D	SUPERIORCC	42	5980 P	272	200	18		263	335	7 03			
7 N	7 W	27 H 1	220	D D	SUPERIORCC	40	6022 P	271	200	18		264	338	7 04			
7 N	7 W	27 H 4	223	D D	SUPERIORCC	43	5995 P	272	200	18		263	337	7 07			
7 N	7 W	28 A 4	225	D D	SUPERIORCC	9	5907 C	249	200	3		242	349	6 03			
7 N	7 W	28 A 4	357	D D	SUPERIORCC	37	5900 T	93	200 *	18							
7 N	7 W	30 H 5	226	D D	HUNT R W	C3	5917 P	227	200	17		222	370	5 02			
7 N	7 W	36 H 3	216	P T	MILLER OC	1	5325 Y	671	200	15		195	338	7 00			
7 N	8 W	12 F 1	178	D D	HUNT R W	D1	6513 P	282	200	17		273	378	5 09			
7 N	8 W	13 B 6	179	S H	BAUSER ED		6191 P	245	200			240	379	5 00			
7 N	8 W	14 B 5	177	W W	IND C MILK		6727 P	585	200	24		246	427	4 00			
7 N	8 W	14 D 3	253	S A	CONSOL STL	1	6392 P		200	12		244	395	5 06			
7 N	8 W	16 A 2	181	S A	CROWHOLLOW	HS	5901 P		200			160	430	5 00			
7 N	8 W	16 A 2	350	C H	THORP WELL		5740 T	35	200	33							
7 N	8 W	21 H 1	180	S A	CROWHOLLOW	AS	5883 P		200			160	428				
7 N	8 W	24 G 8	182	S A	NAYLOR M		6196 P		200			247	373	6 00			
7 N	8 W	26 A 2	183	D D	HUNT RW	C4	5806 C	218	200	17		208	373	5 02			
7 N	8 W	26 A 5	351	D N	COAL TEST		6250 T		200								
7 N	8 W	32 E 2	345	W W	THORP WELL	2	6000 T	39	200	33							
7 N	8 W	32 F 1	184	D D	BIVENS	3	5416 P	155	200	6		151	391	3 02			
7 N	8 W	32 F 1	368	W W	THORP WELL		5450 T	38	200	33							
7 N	8 W	33 E 8	352	D N	COAL TEST		5600 T		200								
7 N	8 W	34 B 6	185	D D	BIVENS	B1	5430 H	130	200	6		124	419	2 00			
7 N	8 W	34 E 1	506	D N			6000 T		200								
7 N	8 W	35 H 4	186	S A	JORDAN LAN		5906 P		200	29		225	366	6 00			
7 N	8 W	36 D 1	187	D D	HUNT RW	C5	5883 C	227	200	17		222	366	4 06			
7 N	8 W	36 E 5	298	D N			6020 T		200								
7 N	9 W	35 E 1	370	S A	LYKING L		5246 P		199								
7 N	9 W	36 D 8	410	S H	MOORE CC	AS	5512 P		199			90	461				
7 N	9 W	36 E 7	333	S H	MOORE CC	HS	5769 P		199			115	462	5 00			
8 N	6 W	4 A 8	285	P T	DUNCANBROS	2	6667 P	650	200	21		386	281	5 00			
8 N	6 W	5 B 3	516	P N	DUNCANBROS		6630 P		200								

MCPN.

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
8 N	6 W	7 G 2	267	S A	PERRY CC KIMB		6630 P		200			377	286	9 00			
8 N	6 W	8 F 1	452	P T	DUNCANBROS		6612 P	655	200*	30		370	291	6 00			
8 N	6 W	8 F 1	518	P N	DUNCANBROS		6634 P		200*								
8 N	6 W	8 F 1	519	P N	DUNCANBROS		6619 P		200*	30							
8 N	6 W	8 F 1	520	P N	DUNCANBROS		6612 P		200*	30							
8 N	6 W	8 F 1	521	P N	DUNCANBROS		6611 P		200*	30							
8 N	6 W	8 F 8	522	P T	DUNCANBROS		6625 P		200*								
8 N	6 W	8 G 1	286	P T	DUNCANBROS		6626 P	2560	200*	21		368	295	6 00			
8 N	6 W	9 G 6	313	S A	CONSOL STLCLYD		6661 P		200			396	270	6 00			
8 N	6 W	9 G 7	500	C N	DUNCANBROS		6630 F		200*								
8 N	6 W	9 G 8	132	P T	DUNCANBROS		6665 P	652	200*			385	282				
8 N	6 W	9 G 8	133	P S	DUNCANBROS	4	6665 P	792	200*	20		380	287				
8 N	6 W	9 H 6	405	S A	CONSOL STL	AS	6651 P		200								
8 N	6 W	9 H 8	501	C N	DUNCANBROS		6630 F		200*								
8 N	6 W	9 H 8	287	P S	DUNCANBROS	5	6663 P	649	200*	21							
8 N	6 W	11 C 4	134	D D	SUPERIORCC	28	6663 P	413	201	14		405	261	7 02			
8 N	6 W	12 E 4	135	D D	SUPERIORCC	26	6650 H	415	201	14		409	256	5 03			
8 N	6 W	15 A 4	136	D D	SUPERIORCC	25	6029 P	361	201	15		353	250	6 08			
8 N	6 W	17 B 2	176	P N	RICE H W		6450 T		200	15							
8 N	6 W	18 A 2	138	D D	SUPERIORCC	15	6545 P	375	200	13		366	289	7 09			
8 N	6 W	18 C 6	288	P T	DUNCANBROS		6550 T	644	200			345	310	8 00			
8 N	6 W	18 D 6	314	S A	CONSOL STLGILL		6540 P		200			366	288	8 00			
8 N	6 W	19 G 6	139	D D	SUPERIORCC	20	6544 P	350	200	13		340	314	8 09			
8 N	6 W	20 A 6	289	G W	HERCULESOG		6493 P	575	200	31		322	327	9 00			
8 N	6 W	20 A 6	289	G W	NO 2 COAL										407	242	5 00
8 N	6 W	20 B 6	436	P N	COAG OG		6200 T		200	23							
8 N	6 W	20 C 5	437	P N	COAG OG		6450 T		200	23							
8 N	6 W	20 C 7	438	P N	COAG OG		6430 T		200	23							
8 N	6 W	25 A 2	322	D D	MADISON CC	19	6840 C	750	201	24		416	268	8 03			
8 N	6 W	25 A 2	322	D D	NO 2 COAL										506	178	1 00
8 N	6 W	25 H 3	140	D D	SUPERIORCC	27	6933 P	444	201	14		436	257	7 04			
8 N	6 W	28 D 5	141	D D	SUPERIORCC	16	5813 C	302	200	13		293	288	8 00			
8 N	6 W	29 B 4	430	P N	COAG OG		6050 T		200*	25							
8 N	6 W	29 D 7	142	P T	COAG OG		6250 T	603	200			315	310	6 00			
8 N	6 W	29 E 2	439	P N	COAG OG		6400 T		200*	25							
8 N	6 W	29 E 3	214	P N	COAG OG		5950 T		200	25							
8 N	6 W	29 E 4	347	P N			5600 T		200								
8 N	6 W	29 F 4	348	P N			6400 T		200								
8 N	6 W	29 F 6	250	S H	SUPERIORCC	1	6300 P		200	3		320	310	7 06			
8 N	6 W	29 G 4	143	P T	COAG OG		6470 P	536	200	23		325	322	6 00			

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. / In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. / In.
8 N	6 W	29 G4	431	PN	COAG OG CO		6451 P		200	25							
8 N	6 W	29 H5	233	PN	COAG OG		6450 T		200	23							
8 N	6 W	29 H5	227	PN	SHERMAN		6500 T		200	30							
8 N	6 W	30 A1	144	DD	SUPERIORCC		6418 P	347	200	3		339	303	7 00			
8 N	6 W	30 E5	237	PN	SHERMAN		6200 T		200	28							
8 N	6 W	30 E8	238	PN	SHERMAN		6200 T		200	29							
8 N	6 W	30 H6	145	DD	SUPERIORCC	23	6520 P	346	200	13		339	313	7 03			
8 N	6 W	31 A8	147	DD	SUPERIORCC	1A	6344 C	332	200	3		322	312	8 02			
8 N	6 W	31 H8	146	DD	SUPERIORCC	4	6376 P	349	200	3		340	298	8 01			
8 N	6 W	34 F8	148	DD	SUPERIORCC	21	6554 P	361	200	13		352	303	7 09			
8 N	6 W	35 G3	149	DD	MADISON CC	15	6783 C	2000	201	23		409	269	8 00	448	230	2 08
8 N	6 W	35 G3	149	DD	NO 4 COAL										461	217	1 10
8 N	6 W	36 A1	324	DD	MADISON CC	16	6732 C	1000	201	23		412	261	8 00	441	232	4
8 N	7 W	3 B5	273	PN	MILLIKEN J		6468 P		200	16							
8 N	7 W	4 A3	152	DD	SUPERIORCC	14	6505 P	302	200	3		294	357	7 06			
8 N	7 W	4 F7	151	DD	UNION PAC	4	6527 P	293	200	12		281	372	7 05			
8 N	7 W	10 F1	490	CN			630 T		200								
8 N	7 W	10 F5	153	DD	CRAWFORD		6490 P	315	200	3		307	342	7 06			
8 N	7 W	11 H7	154	DD	SUPERIORCC	12	6458 P	303	200	3		294	352	7 01			
8 N	7 W	13 A1	315	SA	CONSOL STL DOR		6598 P	373	200	80		366	294	7 10			
8 N	7 W	13 A1	409	SA	CONSOL STL AS		6593 P		200 *								
8 N	7 W	13 E4	156	CH	GILLESP CC		6630 H	353	200	18		343	320	7 06			
8 N	7 W	13 E4	251	SH	GILLESP CCLDOG		6631 P		200			347	316	7 09			
8 N	7 W	13 F4	155	DD	SUPERIORCC	19	6671 P	368	200	13		359	308	8 00			
8 N	7 W	15 A3	157	DD	SUPERIORCC	13	6544 P	328	200	3		320	334	7 06			
8 N	7 W	18 A8	158	DD	SULLIVN MA	5	6401 C	270	200	12		260	380	5 08			
8 N	7 W	23 A2	290	PT	HERCULESOG		6480 H	625	200	31		308	340	5 00			
8 N	7 W	23 A2	290	PT	NO 2 COAL										390	258	
8 N	7 W	25 G1	159	PT	SHERMANBRO		6423 P	546	200	23		316	326	7 00			
8 N	7 W	25 G2	163	PT	SHERMANBRO		6494 P	606	200	23		336	313	8 00			
8 N	7 W	29 A4	160	DD	SUPERIORCC	35	6606 P	317	200	17		310	351	6 08			
8 N	7 W	32 B8	491				6620 T		200								
8 N	7 W	32 D5	161	DD	SULLIVN MA	15	6638 C	310	200	13		302	362	5 06			
8 N	7 W	34 D4	162	DD	SUPERIORCC	5	6519 C	324	200	3		315	337	7 00			
8 N	7 W	36 H8	252	SH	SUPERIORCC	3	6503 P		200	5		346	304	7 00			
8 N	8 W	2 A3	164	DD	SULLIVN MA	10	5812 C	192	200	12		182	399	5 04			
8 N	8 W	10 B6	165	DD	SULLIVN MA	7	6258 C	253	200	12		207	419	2 08			
8 N	8 W	12 C4	167	DD	R W HUNT		6390 H	254	200	17		248	391	5 07			
8 N	8 W	12 D8	166	DD	DUNHAM		6330 H	244	200	12		236	397	6 07			
8 N	8 W	14 F2	168	DD	R W HUNT	D6	6273 P	259	200	17		255	372	4 03			

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
8 N	8 W	15 A5	455	PT	AM PET COR		6357 P	440	200	38		225	411	5 00			
8 N	8 W	15 A5	455	PT	NO 2 COAL										309	327	2 00
8 N	8 W	15 A6	453	PT	AM PET COR		6246 P	425	200	38		214	411	3 00			
8 N	8 W	15 A6	453	PT	NO 2 COAL										298	327	
8 N	8 W	15 A6	291	PT	YOUNG L C		6355 P	476	200	30		220	416	3 00			
8 N	8 W	15 A6	291	PT	NO 2 COAL										300	336	6 00
8 N	8 W	15 B7	323	PT	BOONE OC		6127 P	465	200	36		212	401	4 00			
8 N	8 W	15 C5	454	PT	AM PET COR		6360 C	550	200	38		237	399	6 00			
8 N	8 W	15 C5	454	PT	NO 2 COAL										324	312	2 00
8 N	8 W	15 E6	349	PN			6400 T		200								
8 N	8 W	22 D4	461	PT	WILLIAMS		6450 C	505	200	40		237	408				
8 N	8 W	22 F8	456	CH	AM PET COR		6360 P	472	200	39		230	406				
8 N	8 W	22 G6	344	PT	AM PET COR		6404 P	448	200	39		230	410				
8 N	8 W	22 G6	344	PT	NO 2 COAL										320	320	
8 N	8 W	22 H4	457	PT	AM PET COR		6386 P	444	200	39		225	414				
8 N	8 W	22 H4	457	PT	NO 2 COAL										310	329	
8 N	8 W	23 E1	169	DD	R W HUNT	D5	6514 P	270	200	17		263	388	5 10			
8 N	8 W	25 A1	170	DD	R W HUNT	D3	6560 H	297	200	17		286	370	6 02			
8 N	8 W	26 A5	171	DD	R W HUNT	D4	6366 C	250	200	17		239	398	6 05			
8 N	8 W	27 A6	458	PT	R J YOUNG		6580 H	550	200	39		235	423	5 00			
8 N	8 W	27 A6	458	PT	NO 2 COAL										325	333	
8 N	8 W	36 A1	172	DD	R W HUNT	D2	6717 C	303	200	17		296	376	5 10			
8 N	8 W	36 B6	173	DD	SULLIVN MA	13	6696 C	293	200	12		284	386	5 04			
8 N	9 W	6 F6	174	SA	GARRETT M	AS	6093 P	351	199	7				*0			
8 N	9 W	6 G6	249	SA	GARRETT M	HS	6080 F		199					*0			
8 N	9 W	6 H8	459	WW	KUHSE E		6034 P	623	199	34				*0			
8 N	9 W	6 H8	459	WW	NO 2 COAL										220	383	3 00
8 N	9 W	13 A7	460	PS	SPENCEBROS		6378 P	1755	199	38		197	441	5 06			
8 N	9 W	13 A7	460	PS	NO 2 COAL										289	349	1 00
8 N	9 W	25 G2	175	PT	SHPMANWELL		6263 P	930	199	7		169	457	1 00			
8 N	9 W	25 G5	369	SA	SHIPMAN CO		6420 P		199								
8 N	9 W	27 H5	408	PN			6342 P		199								
9 N	6 W	17 G8	137	PN	MILLER OC		6410 H		200								
9 N	6 W	18 F1	125	DD	WILM STAR	3	6380 F	338	200	3		331	307	7 00			
9 N	6 W	20 H8	126	DD	PITTS BUFF	4	6430 H	392	200	13		346	297	4 05			
9 N	6 W	21 H1	127	DD	PITTS BUFF	2	6585 C	403	200	13		361	298	4 06			
9 N	6 W	23 A2	469	CS			6700 T		201		3	376	294	6 02			
9 N	6 W	25 D7	335	PT	ED POUND		6680 H	840	201	11		390	278	4 00			
9 N	6 W	30 D1	128	DD	PITTS BUFF	5	6540 T	342	200	13		335	319	6 00			
9 N	6 W	31 A1	129	DD	PITTS BUFF	3	6565 Y	365	200	13		357	300	7 04			
9 N	6 W	32 G1	130	DD	WILM STAR	2	6682 Y	373	200	3		359	309	5 04			
9 N	6 W	33 A2	131	DD	PITTS BUFF	1	6720 H	382	200	13		373	299	6 02			

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
9 N	6 W	33 H2	150	PT	WIND GANEY		6621 P	617	200	38		362	300	6 00			
9 N	7 W	1 C5	462	PS	BRDGES ETL		6330 H	1613	191	41							
9 N	7 W	3 G7	478	N			5449 P		191								
9 N	7 W	4 C4	91	CS	ROWE CO		5482 P	460	191	12		190	358	5 00			
9 N	7 W	4 F3	447	WW	CRLNVLL CY		5500 T	85	191	35							
9 N	7 W	5 B8	93	DD	UN PACIFIC	3	6166 P	256	200	12		245	372	6 00			
9 N	7 W	5 C8	92	PT	CHRYSLER	1	6187 P	2107	200								
9 N	7 W	5 C8	92	PT	NO 2 COAL										290	329	3 00
9 N	7 W	6 G4	94	PS	R WE CO	1	6280 C	507	191	12		261	367	7 00			
9 N	7 W	7 C1	100	PT	IMPROMP XC	1	5459 P	409	200*			160	386	5 00			
9 N	7 W	7 C5	95	PT	IMPROMP XC		5352 P	455	100			160	375				
9 N	7 W	7 C5	95	PT	NO 2 COAL										241	294	
9 N	7 W	7 D1	463	PT	O Z SMITH		5424 P	1380	200*	40							
9 N	7 W	7 D2	96	PT	IMPROMP XC	1	5548 P	381	200*								
9 N	7 W	7 D2	270	CN			5615 P		200*								
9 N	7 W	7 G3	294	CN			6150 P		200*								
9 N	7 W	7 G3	492	PN			6160 P		200*								
9 N	7 W	8 B2	97	PS	IMPROMP XC	1	5990 B	548	200*	9							
9 N	7 W	8 C5	346	PN			5300 T		200*								
9 N	7 W	8 C7	493	PN			5370 P		200*	9							
9 N	7 W	8 C8	515	PN			5373 P		200*	9							
9 N	7 W	8 C8	494	PN			5360 P		200*								
9 N	7 W	8 D4	380	PN			5379 P		200*								
9 N	7 W	8 D7	495	PN			5400 P		200*								
9 N	7 W	8 D7	514	PN			5381 P		200*								
9 N	7 W	8 E3	106	PT	IBBETSON	2	5399 P	376	200*	11							
9 N	7 W	8 E4	105	PT	IBBETSON	1	5410 P	410	200*	11							
9 N	7 W	8 E4	107	PT	IBBETSON	3	5402 P	412	200*	11							
9 N	7 W	8 E4	512	PN			5403 P		200*								
9 N	7 W	8 E5	98	PT	IMPROMP XC	5	5364 P	437	200*	11							
9 N	7 W	8 E5	376	PT			5419 P		200*								
9 N	7 W	8 E5	510	PN			5393 P		200*								
9 N	7 W	8 E6	375	PT			5374 P		200*								
9 N	7 W	8 E6	99	PT	IMPROMP XC	3	5407 P	506	200*			160	381	5 00			
9 N	7 W	8 E7	513	PN			5497 P		200*								
9 N	7 W	8 F3	337	PS	IBBETSON	5	5450 T	420	200*	11							
9 N	7 W	8 F4	511	PN			5518 P		200*								
9 N	7 W	8 F4	108	PS	IBBETSON	4	5427 P	419	200*	11							
9 N	7 W	8 F5	102	PT	IMPROMP XC	7	5416 P	413	200*	13							
9 N	7 W	8 F6	374	PN			5667 P		200*								

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
9 N	7 W	8 F6	295	PT	CROSS ETAL		5600 T	444	200	* 38		196	364	7 00			
9 N	7 W	8 F6	295	PT	NO 2 COAL										270	290	
9 N	7 W	8 F6	103	PS	IMPROMP XC		5430 T	396	200	* 13							
9 N	7 W	8 G6	101	PS	IMPROMP XC	1	5490 T	466	200	* 13							
9 N	7 W	8 G8	104	PT	OHIO OIL	1	6160 T	565	200	* 13		255	361	4 00			
9 N	7 W	9 F2	109	CH	LISTON	1	6131 P	530	200			240	373	10 00			
9 N	7 W	10 C1	296	DD	UN PACIFIC	1	6334 P	307	200	12		294	339	7 04			
9 N	7 W	10 F1	112	PT	IMPROMP OG	1	5556 P	578	200			235	321	5 00			
9 N	7 W	10 F5	111	PT	CHRYSLER		5529 P	525	200			210	343	5 00			
9 N	7 W	10 H8	404	DN	UN PACIFIC		5510 F		200								
9 N	7 W	15 C4	113	PT	GRIFFELL	1	6830 T	655	200	10		360	323	5 00			
9 N	7 W	16 G5	114	PT	IMPROMP XC	1	6279 P	507	200			257	371	7 00			
9 N	7 W	16 G5	114	PT	NO 2 COAL										340	288	
9 N	7 W	16 H5	115	PS	ROWE CO	2	6238 P	507	200	12		257	367	7 00			
9 N	7 W	17 A3	116	DD	UN PACIFIC	11	5505 C	192	200	12		183	368	5 00			
9 N	7 W	17 B3	118	PT	CHRYSLER		5470 T		200								
9 N	7 W	17 D6	119	PS	D DENBY	2	5450 T	430	200								
9 N	7 W	17 F7	117	PT	IMPROMP XC		5431 P	450	200			172	371	5 00			
9 N	7 W	18 H2	120	PT	CHRYSLER		5385 P	880	200	9		175	364	5 00			
9 N	7 W	21 B5	277	GW	HERCULESOG	3	5669 P	460	200	31		195	372	7 00			
9 N	7 W	21 D6	276	GW	HERCULESOG		5760 C	420	200	30							
9 N	7 W	21 D8	282	GW	HERCULESOG		6000 T	457	200	31		220	380				
9 N	7 W	21 E7	275	PT	HERCULESOG		5670 C	390	200	* 30		178	389				
9 N	7 W	21 E7	275	PT	NO 2 COAL										260	307	7 00
9 N	7 W	21 E7	504	OU	LIMESTONE		5590 H		200	*							
9 N	7 W	21 E7	121	PS	MILLER OC		5672 P	417	200	*		175	392	7 00			
9 N	7 W	21 E8	16	PS	MILLER OC		5646 P	370	200	*		187	378				
9 N	7 W	21 F6	281	GW	HERCULESOG		6330 C	545	200	* 30		227	406	5 00			
9 N	7 W	21 F8	280	GW	HERCULESOG	4	5650 C	405	200	* 30		187	378	8 00			
9 N	7 W	21 G6	279	GW	HERCULESOG	3	6270 C	490	200	* 30		255	372	7 00			
9 N	7 W	21 G8	278	GW	HERCULESOG		5640 C	417	200	* 30		192	372	5 00			
9 N	7 W	22 D5	122	DD	UN PACIFIC	2	6417 P	300	200	12		288	354	7 04			
9 N	7 W	23 A8	448	CH	BUTTERFLD		6430 H	746	200	38		272	371	7 00			
9 N	7 W	23 A8	123	CH			6440 H	284	200	12		275	369	6 10			
9 N	7 W	28 D1	75	PS	IMPROMP XC		6382 P		200	9							
9 N	7 W	28 H4	283	GW	HERCULESOG		6370 H	575	200	31		281	356	12 00			
9 N	7 W	29 B8	124	DD	UN PACIFIC		6249 P	351	200	12		260	365	8 07			
9 N	7 W	29 B8	124	DD	NO 2 COAL										347	278	2 09
9 N	7 W	34 H8	284	PT	HERCULESOG		6350 H	550	200	31		270	365	5 00			
9 N	8 W	21 C5	343	PT	ERIE DRILL		5300 T	500	200	38							

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
9 N	8 W	22 A4	450	DD	SNCLAIR RF		5300 T	224	200 *	19	7	217	313	6 02			
9 N	8 W	22 E1	85	CS			5324 P		200			140	392	7 00			
9 N	8 W	23 C1	86	DD	UN PACIFIC	6	6084 C	245	200	12		204	404	3 07			
9 N	8 W	23 E2	84	PT	OHIO OIL		5200 T	351	200	12		138	382	4 00			
9 N	8 W	23 G5	340	PT	ANDERSON		5300 T	371	200	38							
9 N	8 W	27 D2	87	PT	IMPROMP OG	1	5330 H	612	200	9		123	410	5 00			
9 N	8 W	28 H1	371	DD	SNCLAIR OC		5232 P	123	200	19		118	405	4 06			
9 N	8 W	33 G5	88	DD	UN PACIFIC	8	6053 P	228	200	12		218	387	5 02			
9 N	8 W	34 A8	341	DD	SNCLAIR OC		6146 P	237	200	19		228	387	7 06			
9 N	8 W	34 C7	89	PT	PITT		5462 P	600	200	19		194	352	7 00			
9 N	8 W	34 D8	451	DD	SNCLAIR RF		6050 T	233	200	19	7	226	379	5 07			
9 N	8 W	35 B8	470	DD	SNCLAIR OC		5514 P	176	200	19		169	382	5 11			
9 N	8 W	35 G2	517	PT	G E BRANRD		6200 T	1635	200	40							
9 N	8 W	35 H1	464	PT	STEWARD WA		6100 T	1607	200	40							
9 N	8 W	35 H8	373	DD	SNCLAIR OC		6034 P	210	200	19		204	399	5 00			
9 N	8 W	36 H5	90	DD	UN PACIFIC	9	6197 C	240	200	12		231	389	5 00			
9 N	9 W	1 C3	82	PT	MDDLEKAUFF	1	5805 P	476	192								
9 N	9 W	2 D8	312	SA	BREMEN CC		5908 P		192								
9 N	9 W	2 G7	366	PT			5925 P		192								
9 N	9 W	2 G7	83	PT	DEWS	1	5927 P	551	192	10		150	443	4 00			
9 N	9 W	2 G7	83	PT	NO 2 COAL										260	333	4 00
10 N	6 W	1 A2	441	PT	P L MILLER		6315 P	720	190	40		320	312	6 00			
10 N	6 W	2 C5	443	PT	ADAMS LAGE		6184 P	740	190	40		335	283	5 00			
10 N	6 W	4 A4	45	DD	PEABODY	8	6128 P	313	191	13		306	307	6 00			
10 N	6 W	4 A6	246	SA	STD OC	3	6204 P		191		3	311	309	6 05			
10 N	6 W	4 A6	476	SA	STD OC	AS	6238 P		191								
10 N	6 W	6 H3	46	DD	R W HUNT	A6	6168 P	308	191	17		299	318	7 04			
10 N	6 W	8 H5	47	DD	PEABODY	9	6211 P	346	191	13		336	285	7 08			
10 N	6 W	9 E7	48	DD	R W HUNT	A7	5901 C	281	191	17		271	319	8 00			
10 N	6 W	9 H1	49	DD	R W HUNT	A11	5975 P	695	191	17		296	302	6 02			
10 N	6 W	10 H1	50	DD	R W HUNT	A8	5862 C	305	190	17		296	290	6 02			
10 N	6 W	10 H7	465	PT	ADAMS LAGE		6060 T	621	191	40							
10 N	6 W	11 A4	51	DD	R W HUNT	A9	6366 C	354	190	17		345	292	7 08			
10 N	6 W	11 G5	52	DD	PEABODY	7	6312 P	356	190	13		350	281	5 08			
10 N	6 W	12 B7	445	PT	H A COVER		6350 C	670	190	40		355	280	7 06			
10 N	6 W	12 B7	445	PT	NO 2 COAL										450	185	3 00
10 N	6 W	14 C4	53	DD	CRAWFORD	12	6214 P	500	190	3		336	285	4 06			
10 N	6 W	14 C4	53	DD	NO 2 COAL										439	182	4 09
10 N	6 W	15 E4	54	DD	R W HUNT	C9	6345 C	352	190	17		344	291	5 10			
10 N	6 W	16 E6	55	DD	R W HUNT	D8	5820 P	298	191	17		288	294	7 02			
10 N	6 W	17 C5	56	DD	R W HUNT	D9	6121 P	333	191	17		319	293	8 00			

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
10N	6W	20 A4	61	DD	R W HUNT	B8	6230 H	341	191	17		332	291	6 06			
10N	6W	21 E4	58	DD	R W HUNT	B7	6347 P	338	191	17		327	308	6 09			
10N	6W	22 G4	59	DD	R W HUNT	C10	6299 C	346	190	17		338	292	6 04			
10N	6W	23 H5	60	DD	R W HUNT	A10	6109 C	326	190	17		318	293	6 01			
10N	6W	30 D1	62	DD	CRAWFORD	15	6200 T	319	191	3	7	311	309	7 02			
10N	6W	32 A1	63	DD	CRAWFORD	5	6387 P	327	191	3		320	319	6 00			
10N	6W	33 A4	64	DD	PITTS BUFF	6	6410 P	370	191	13		326	315	4 01			
10N	6W	36 A5	468	CN			6561 P		190								
10N	6W	36 A5	509	CN			6346 P		190								
10N	7W	4 B3	65	DD	UN PACIFIC	14	6296 P	318	191	12		308	322	6 03			
10N	7W	12 E5	68	DD	UN PACIFIC	17	6144 C	352	191	13	3	341	273	7 10			
10N	7W	12 E6	67	PT	MILLER FAD	1	6126 P	580	191	23		285	328	7 00			
10N	7W	12 E6	67	PT	NO 2 COAL										385	228	5 00
10N	7W	13 D7	69	CH	CRAWFORD		5975 P	323	191	12		312	286	7 07			
10N	7W	17 A7	71	PT	OHIO OIL	2	6275 P	482	191	13		226	402	6 00			
10N	7W	17 H4	70	DD	UN PACIFIC	18	6423 P	301	191	13		289	353	6 01			
10N	7W	20 A5	479	CN			6217 P		191*								
10N	7W	20 B4	480	CN			6171 P		191*								
10N	7W	20 B5	486	CN			6210 P		191*								
10N	7W	20 C4	481	CN			6320 P		191*								
10N	7W	20 C5	332	PK	MUDGETT F	7	6233 P	485	191*	41							
10N	7W	20 C6	336	PK	MUDGETT F	9	6128 P	472	191*	41							
10N	7W	20 C6	334	PK	MUDGETT F	8	6113 P	472	191*	41							
10N	7W	20 C6	484	CN			6193 P		191*								
10N	7W	20 C6	487	CN			6190 T		191*								
10N	7W	20 C6	488	CN			6190 T		191*								
10N	7W	20 D4	482	CN			6303 P		191*								
10N	7W	20 D5	483	CN			6310 P		191*								
10N	7W	20 D6	485	CN			6223 P		191*								
10N	7W	20 D6	489	CN			6080 T		191*								
10N	7W	21 B5	367	SA	O CALAMITY		6300 T		191								
10N	7W	21 G2	247	SH	STD OC	1B	6304 P		191			294	336	6 06			
10N	7W	24 D2	72	PT	IMPROMP OG	1	5750 T	550	191			278	297	4 00			
10N	7W	24 D2	72	PT	NO 2 COAL										370	205	2 00
10N	7W	24 G4	73	DD	UN PACIFIC	12	6180 P	351	191	12		342	276	6 06			
10N	7W	25 F6	74	PT	IBBET S OC		5758 P	791	191			262	314	7 00			
10N	7W	28	3	CH				270	191*			26.4		6 00			
10N	7W	28 F7	248	SA	STD OC	1A	6286 P		191			258	371	7 00			
10N	7W	30 H1	446	PT	MUDGETT F		6194 P	560	191	40		259	360	2 00			
10N	7W	30 H1	446	PT	NO 2 COAL										370	249	

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
10N	7W	33 C7	269	SH	S MINE CC		6057 P		191		3	255	351	6 06			
10N	7W	34 A8	477	CN			6128 P		191								
10N	7W	34 B7	76	CS	LEOPOLDT	2	6231 P	500	191			275	348	7 00			
10N	7W	35 F7	78	PT	IMPROMP OG	2	5611 P	535	191	9		220	341	5 00			
10N	7W	35 F8	77	PT	IMPROMP OG	1	5611 P	447	191	9		208	353	7 00			
10N	7W	35 G8	79	DD	UN PACIFIC	16	5604 P	228	191	13		216	344	6 10			
10N	7W	36 E1	81	DD	WILM STAR	1	6046 P	319	191	3		311	294	7 02			
10N	8W	14 B4	353	CS	CRAWFORD		6188 P	496	191			226	393	6 00			
10N	9W	29 E2	306	SH	DAMS C-C		5195 P		192			38	482	6 00			
10N	9W	29 F2	429	SA	FROST CO		5200 T		192*			30	490				
10N	9W	29 F2	355	OU	LIMESTONE		4985 P		192								
10N	9W	29 F5	307	SA	DAWSON AW		5500 T		192			50	500				
10N	9W	29 G2	354	SA	LOCAL MINE		4923 P		192				492	3 00			
10N	9W	29 H3	496	SA	DAVIS MINE		4950 T		192								
10N	9W	29 H4	304	SA	RUDOLPHBIE		5000 T		192								
10N	9W	30 A1	310	SA	HARBAUGH		5400 T		192			50	490	5 06			
10N	9W	30 A2	309	SA	RAND CC		5346 P		192			56	479	7 00			
10N	9W	30 A4	331	SA	BOWMANJOHN		4979 P		192			20	478	7 00			
10N	9W	30 C3	308	SA	DAVIS CC		5288 P		192			47	482	7 00			
10N	9W	30 D1	330	SA	DAVIS CC		5419 P		192			75	467	7 00			
10N	9W	30 D1	356	SA	PICKFORD C		5398 P		192*								
10N	9W	31 H8	311	SA	KIRCHNERWS		4967 P		192			23	474	6 00			
10N	9W	32 E1	466	PT	DILL ETAL		5570 H	1540	192	39							
11N	6W	4 E2	33	DD	CRAWFORD	6	6487 P	332	191	2		323	326	6 02			
11N	6W	5 B7	244	SA	UNION FC	6	6735 P	358	191	94		351	323	6 09			
11N	6W	18 C7	245	SA	UNION FC	1	6699 P		191			326	344	6 00			
11N	6W	19 A2	35	CH	PEABODY	6	6527 P	340	191	13		334	319	5 06			
11N	6W	20 A8	36	DD	PEABODY		6527 P	333	191	12		328	325	3 00			
11N	6W	24 H1	37	DS			6030 P	328	190			322	281	6 06			
11N	6W	25 B1	38	DD	CRAWFORD	9	6095 P	334	190	2		324	286	8 04			
11N	6W	25 C1	508	CN			6116 P		190								
11N	6W	29 A7	266	SA	STD OC	2	6373 P		191	18		320	317	7 00			
11N	6W	29 B7	40	DD	STD OC	2	6373 P	400	191			320	317	6 11	357	280	6
11N	6W	29 E5	39	DD	CRAWFORD	8	6442 P	328	191	2		316	328	6 06			
11N	6W	30 A1	41	DD	PEABODY	5	6454 P	352	191	13		342	303	7 04			
11N	6W	33 E3	42	DD	PEABODY	4	6225 P	320	191	13		311	312	6 02			
11N	6W	34 E1	43	DD	CRAWFORD	10	6084 P	332	190	3		325	283	6 03			
11N	6W	35 A4	442	PT	ADAMS LAGE		6292 P	633	190	40		345	284	5 00			
11N	6W	35 G5	467	TD	PEYNTN ETL		6150 T	620	190	40							
11N	6W	36 B4	44	DD	CRAWFORD	11	6342 P	361	190	3		354	280	7 00			

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. In.
11 N	7 W	7 E 1	502	PT	ADAMS LAGE		6400 T	1487	191	41		234	406	6 00			
11 N	7 W	8 G 5	66	DD	R W HUNT	B 5	5806 P	179	191			174	407	3 06			
11 N	7 W	10 G 7	22	DD	R W HUNT	B 4	6398 P	275	191	17		266	374	4 09			
11 N	7 W	14 A 6	23	DD	R W HUNT	B 1	6664 C		191	17		337	329				
11 N	7 W	15 E 8	24	DD	R W HUNT	B 2	6322 P	279	191	17		269	363	5 08			
11 N	7 W	16 E 6	25	DD	R W HUNT	B 3	6516 P	271	191	17		264	388	5 06			
11 N	7 W	18 H 3	57	DD	R W HUNT	B 6	5730 H	174	191	17		169	404	4 06			
11 N	7 W	19 E 5	26	DD	R W HUNT	A 4	6339 P	239	191	17		231	403	6 02			
11 N	7 W	20 E 3	27	DD	R W HUNT	A 3	6574 P	295	191	17		285	372	5 08			
11 N	7 W	21 B 1	28	DD	R W HUNT	A 2	6612 C	343	191	17		321	340	6 02			
11 N	7 W	23 A 7	29	DD	R W HUNT	A 1	6592 C	334	191	17		324	335	7 06			
11 N	7 W	24 A 8	30	CH	PEABODY	3	6632 P	342	191	13		323	340	6 06			
11 N	7 W	29 D 8	31	DD	R W HUNT	A 5	6512 P	280	191	17		271	380	5 05			
11 N	7 W	36 E 5	32	DD	PEABODY	1	6460 P	321	191	12		314	332	7 04			
11 N	8 W	4 E 4	19	DD	NW MCPN CC	1	6593 P	875	191	4		241	418	5 05			
11 N	8 W	9 F 4	20	DD	NW MCPN CC	2	6558 P	217	191	4		212	444	4 02			
11 N	8 W	15 H 6	342	TD	PHILLIPS P		5750 T	1828	191	38							
11 N	8 W	23 H 4	449				6370 H		191								
11 N	8 W	32 C 8	21	CH	OHIO CONOC		5880 H	724	192	11		150	438	5 00			
11 N	9 W		325	CS	C P BRANT			724	171 *			300		5 00			
11 N	9 W	23 G 3	18	CS	MILLER H		6350 T	529	192			170	465	7 00			
11 N	9 W	36 C 8	440	PT	HETTICK OD		5340 H	1076	192	36							
12 N	6 W	2 D 4	1	DD	ROYAL COLL	1	6399 P	342	173	3	3	253	387	7 06			
12 N	6 W	2 D 5	299	DN	ROYAL COLL		6379 P		173								
12 N	6 W	2 D 6	2	DD	ROYAL COLL	2	6359 P	254	173	3	3	246	390	7 09			
12 N	6 W	2 E 6	297	DN	ROYAL COLL		6373 P		173								
12 N	6 W	4 A 3	321	SH	VIRDEN CC	A S	6604 P		172								
12 N	6 W	7 A 4	472				6592 P		191								
12 N	6 W	8 A 7	241	SA	C W F CC		6772 P	320	191			312	365	7 08			
12 N	6 W	9 H 3	242	SH	VIRDEN CC	H S	6652 P		172			323	342	6 06			
12 N	6 W	11 E 4	432	CH	LANE BORL		6479 P	270	173								
12 N	6 W	18 E 1	4	DD	ROYAL COLL	3	6657 P	293	191	3		279	387	8 03			
12 N	6 W	30 A 3	8	DD	CRAWFORD	7	6564 P	302	191	3		294	362	7 09			
12 N	6 W	30 H 1	7	DD	CRAWFORD	5	6575 P	314	191	3		306	352	6 10			
12 N	6 W	30 H 7	5	DD	CRAWFORD	3	6411 P	283	191	3		275	366	7 01			
12 N	6 W	31 B 5	6	DD	CRAWFORD	1	6623 P	376	191	3		322	340	4			
12 N	6 W	31 B 6	474	N			6636 P		191								
12 N	6 W	31 E 5	473	N			6629 P		191								
12 N	6 W	31 F 2	10	DD	CRAWFORD	4	6388 P	372	191	3		286	353	7 06			
12 N	6 W	31 F 3	9	DD	CRAWFORD	2	6341 P	505	191	3		305	329	6	337	297	6

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
12 N	6 W	31 H1	11	DD	CRAWFORD	6	6417 P	307	191	3		298	344	7 10			
12 N	6 W	32 E1	12	SA	GRARD COLL	5	6749 C	352	191			345	330	7 00			
12 N	6 W	32 G5	499	WW	GIRARD HS				191 *								
12 N	6 W	36 D1	13	CS			6660 H	348	190			339	327	8 07			
12 N	7 W	5 B6	435	CH	ALDERSON	3	6830 T	115	172								
12 N	7 W	7 D8	243	CH	WALKINGTON	1	6700 T	90	191								
12 N	7 W	8 C8	434	CH	ALDERSON	2	6830 T	116	191								
12 N	7 W	8 D3	433	CH	ALDERSON	1	6760 T	120	191								
12 N	7 W	17 E1	305	PT	O G HAYES		6680 T	578	191	41		240	428	4 00			
12 N	7 W	19 G2	34	CH	M M BUTLER		6600 T	120	191	39							
12 N	8 W	4 A8	507	CH	RUFUS RUSH		6870 T	281	171	37							
12 N	8 W	15 B7	15	DD	SULLIVN MA		6845 P	350	191	4		207	478	3 00			
12 N	8 W	29 D7	14	DD	NW MCPN CC	3	6400 T	173	192	4	7	166	474	5 06			
12 N	8 W	34 G4	475	N			6601 P		191								
12 N	9 W	4 B4	329	SA	LOCAL MINE		5327 P		171			2	531				
12 N	9 W	4 C3	372	SA	LOCAL MINE		5300 P		171								
12 N	9 W	4 F1	303	SA	DUGGER TA		5750 T		171								
12 N	9 W	4 F6	326	OU	COAL		5400 T		171				540				
12 N	9 W	4 F7	301	SA	WOODS P		5400 T		171								
12 N	9 W	4 G2	17	SA	MUSTARD CC		5600 T	42	171			39	521	2 08			
12 N	9 W	4 G3	300	SA	LAKE A		5600 T		171								
12 N	9 W	4 G3	302	SA	LOGAN FRNK		5800 T		171								
12 N	9 W	4 G6	327	OU	LIMESTONE		5700 T		171 *								
12 N	9 W	4 G6	328	SA	LOCAL MINE		5500 T		171				534				
12 N	9 W	4 G7	505	SA	LOCAL MINE		5400 T		171								

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
					MORGAN JAN 1 1942												
13N	8W	2 D2	19	DD	WAVRLY CMC	1	6850 F	334	172			188	497	1 01			
13N	8W	2 D2	19	DD	NO 2 COAL										286	399	1 04
13N	8W	2 E3	18	PT	INT OG CO		6897 P	965	172	9		221	469	2 00			
13N	8W	2 E3	18	PT	NO 2 COAL										324	366	
13N	8W	5 H4	20	PT	PROCTOR		6300 T	1030	171	9							
13N	8W	18 E8	21	PT	WERNER D C		6662 P	1160	171	39		160	506				
13N	8W	18 E8	21	PT	NO 2 COAL										250	416	
13N	8W	22 B3	22	PT	WAVERLY OG		5938 P	650	172	17		130	464	1 00			
13N	8W	22 B3	22	PT	NO 2 COAL										223	371	2 00
13N	8W	22 B3	23	PT	WAVERLY OG		5939 P	1202	172			130	464	1 00			
13N	8W	22 B3	23	PT	NO 2 COAL										223	371	2 00
13N	8W	28 A4	38	PT	MAGNOL PET		6340 C	1754	172	41							
13N	10W	2 H7	11	PT	C T HUNT		6990 P	1512	171	41							
13N	10W	2 H8	12	PT	C T HUNT		6983 P	530	171	40							
13N	10W	30 A2	27	SA	WAGSTAFF C		6008 P	44	170	14		36	565	3 08			
13N	10W	30 B4	28	SL	FISHER WC		5621 P		170			12	550	5 00			
13N	10W	30 B4	29	SA	ROBINSON B		5537 P		170*	14							
13N	10W	30 B5	32	SA	FISHER WT		5675 P		170*			21	547	5 00			
13N	10W	30 B5	31	SA	HOODENPILE		5461 P		170	31		3	543	5 00			
13N	10W	30 B5	30	SA	ORCHARD D		5618 P		170*	19				5 00			
13N	10W	30 B6	13	SA	FISHER WT		6105 P		170	1		55	555	5 00			
13N	10W	30 C4	33	SA	TAYLOR M		6385 P		170*								
13N	10W	30 C5	34	SA	WAGSTAFF F		5953 P	77	170								
13N	10W	30 C7	14	SA	WAGSTAFF F		6180 P		170			90	528	5 00			
13N	10W	30 C8	37	SA	WAGSTAFF F		5963 P		170			55	541	4 10			
13N	10W	30 C8	36	SA	WAGSTAFF F		6113 P		170*								
13N	10W	30 C8	35	SA	WGSTF SMTH		6276 P		170			85	543				
13N	10W	30 D6	16	SA	WAGSTAFF F		6324 P		170			83	549	4 04			
13N	10W	30 H5	15	SA			6450 T	100	170			92	553	4 00			
13N	10W	31 G7	17	RD	ILL GEOL S		5450 T	81	170	28							
13N	10W	31 G7	17	RD	NO 2 COAL										79	466	3 05
13N	11W	11 E2	10	PT	P C IRVIN		6779 P	487	170	30							
14N	8W	7 B8	1	WW	MO KANSAS		7080 H	443	171	30		204	504	4 00			
14N	8W	33 C1	2	PT	WAVERLY OC		6763 P	1680	172	38		175	501	5 00			
14N	8W	33 C1	2	PT	NO 2 COAL										270	406	
14N	9W	4 E1	3	PT	S M P GC		6661 P	495	171	29		145	521	2 00			

(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5*		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
14N	9W	19 D1	4	WW	R R LONG		6930 H	360	171	41							
14N	9W	25 A5	5	SA	APPLE CKCC		6850 F	337	171			202	483	4 00			
14N	9W	25 A5	5	DD	NO 2 COAL										291	394	1 02
14N	9W	36 F3	6	DD	APPLE CKCC		6822 P	470	171			217	465	10			
14N	9W	36 F3	6	DD	NO 2 COAL										295	387	
14N	9W	36 F3	24	WN			6823 P		171								
14N	9W	36 G4	25	SA	APPLE CKCC		6850 F		171								
14N	10W	9 E8	8	SA	FISHER M		6130 H	91	171								
14N	10W	9 E8	8	SA	NO 2 COAL										76	537	3 00
14N	10W	9 G8	7	DD			6000 T	179	171								
14N	10W	28 E5	9	CH	FITZSIMONS		6600 T	136	171								
14N	10W	28 E5	9	CH	NO 2 COAL										128	532	3 09
14N	10W	34 A1	26	WN			6968 P		171	41							

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Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5*		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. / In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. / In.
					SANGAMON JAN 1 1942												
13N	6W	2 G5	25	SA	LEFTON M		6211 P		173			280	341	8 00			
13N	6W	10 H2	10	SA	UNION F C	3	6235 P		173			263	360	6 08			
13N	6W	15 C5	15	SA	PEABODY CC	54	6383 P		173	12		301	337	7 00			
13N	6W	34 F8	28	SA	C W F CC	HS	6529 P	300	172	12		292	361	7 10			
13N	6W	34 G8	73	SA	C W F CC	AS	6467 P		172								
13N	6W	34 G8	69	CH	C W VER CC		6471 P	625	172	8		292	355				
13N	7W	7 D5	20	DD	WAVRLY CC		6257 P	500	172	4		150	476	3 06			
13N	7W	7 D5	20	DD	NO 2 COAL										246	380	2 02
14N	6W	13 G1	21	SA	ILL COL CO	3HS	6040 T		173			243	361	7 01			
14N	6W	13 G1	75	SA	ILL COL CO	AS	6010 T		173								
14N	6W	35 G2	35	SA	PANTHER CK	AS	6250 F		173								
14N	6W	35 H2	22	SA	PANTHER CK	1	6266 P		173			258	369	7 00			
14N	7W	18 F4	56	SH	COSMO CC	AS	6300 T		172								
14N	7W	18 G6	72	SH	COSMO CC	HS	6375 P	180	172			170	470	5 10			
14N	8W	12 D1	74	PN	KOST		6450 T		172	33							

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(See cover page for explanation of all symbols)

Location of Hole			County Number	Type of Hole	Operator	Op'r's. Number	Surface Altitude	Total Depth	Quad. Number	Year Drilled	Doubtful Information	Coal No. 6			Coal No. 5 *		
Township	Range	Section										Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.	Depth (Feet)	Altitude (Feet)	Thickness Ft. | In.
					SCOTT JAN 1 1942												
13N	11W	21	1	DD	MNCHSTR MC		6900 T	312	170*								
13N	11W	21 D7	2	SA	MNCHSTR MC		6800 T		170								
					2												

(See cover page for explanation of all symbols)